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JVC AV-21F3 SERVICE MANUAL

AV-21F3
AV-21FR3
AV-21FMG3B

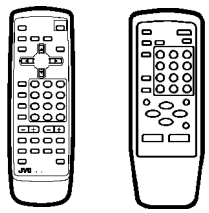
JVC

SERVICE MANUAL

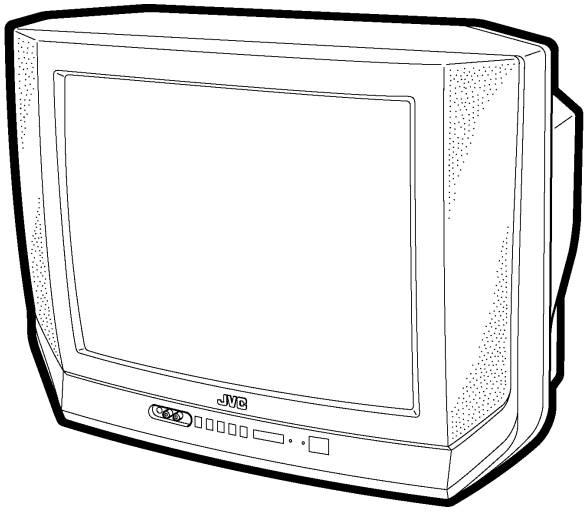
COLOUR TELEVISION

BASIC CHASSIS
CG

AV-21F3
AV-21FR3
AV-21FMG3B



[RM-C90] [RM-C364GY]
[RM-C364]



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No. 52024
Jun. 2002

AV-21F3
AV-21FR3
AV-21FMG3B

SPECIFICATIONS

ITEM		CONTENTS	
		AV-21F3 AV-21FR3	AV-21FMG3B
Dimensions(W × H × D)		619mm × 458mm × 486.5mm	←
Mass		22kg	←
TV RF System		B/G, I, D/K	B/G, I, D/K,M
Colour System	RF Mode	PAL / SECAM	PAL / SECAM / NTSC3.58 / NTSC4.43
	VIDEO Mode	PAL / SECAM / NTSC3.58 / NTSC4.43	←
Teletext System		FLOP (Only for AV-21FR3)	×
Picture Tube		Visible size: 51cm measured diagonally	←
High Voltage		26.5kV±1.5kV(at zero beam current)	←
Receiving Frequency	VHF (VL)	46.25MHz～168.25MHz	←
	VHF (VH)	175.25MHz～463.25MHz	←
	UHF	471.25MHz～863.25MHz	←
	CATV	Cable TVs of Mid (X-Z, S1-S10) Super (S11-S20) & Hyper (S21-S41) bands receivable	←
Intermediate Frequency	VIF Carrier	38.0MHz	←
	SIF Carrier	32.5MHz (5.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)	32.5MHz(5.5MHz) /33.5MHz (4.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)
Colour Sub Carrier Frequency		PAL (4.43MHz), SECAM (4.40625MHz / 4.25MHz) NTSC (3.58MHz / 4.43MHz)	←
Power Input	Rated Voltage	AC110～240V, 50 / 60Hz	←
Power Consumption		90W (Max) / 60W(Avg)	←
Speaker		6cm × 12 cm, Oval type × 2	←
Audio Output		3W (monaural)	←
Aerial Input Terminal		75Ω Unbalanced	←
Input	Video	1V(p-p), 75Ω (Front / Rear)	←
	Audio	500mV(rms) (-4dBs), High impedance, RCA × 2 (Front / Rear)	←
Output	Video	1V(p-p), 75Ω	←
	Audio	500mV(rms) (-4dBs), Low impedance,	←
Headphone jack		3.5mm mini jack	←
Remote Control Unit		[AV-21F3] : RM-C364GY [AV-21FR3] : RM-C90 (Battery size : AA / R06 / UM-3 × 2)	RM-C364 (Battery size : AA / R06 / UM-3 × 2)

Design and specifications are subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

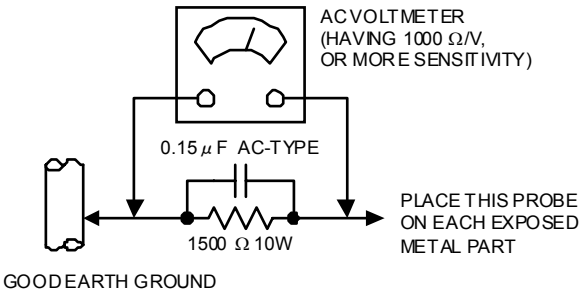
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).

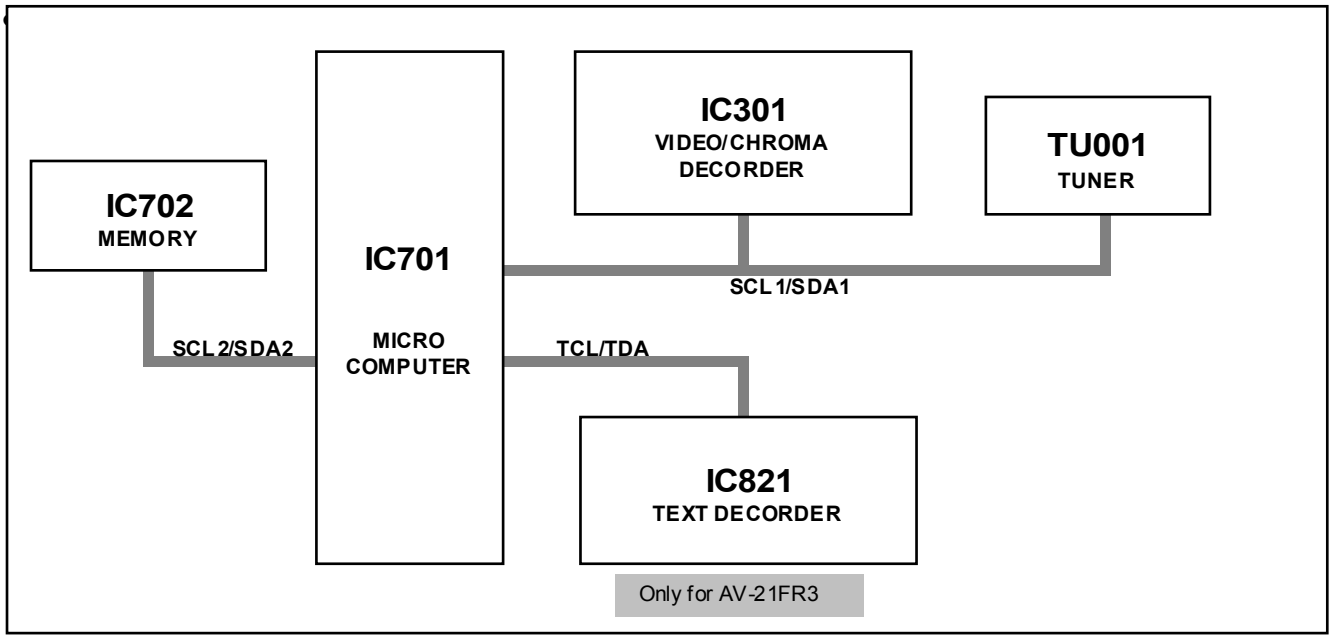


AV-21F3
AV-21FR3
AV-21FMG3B

FEATURES

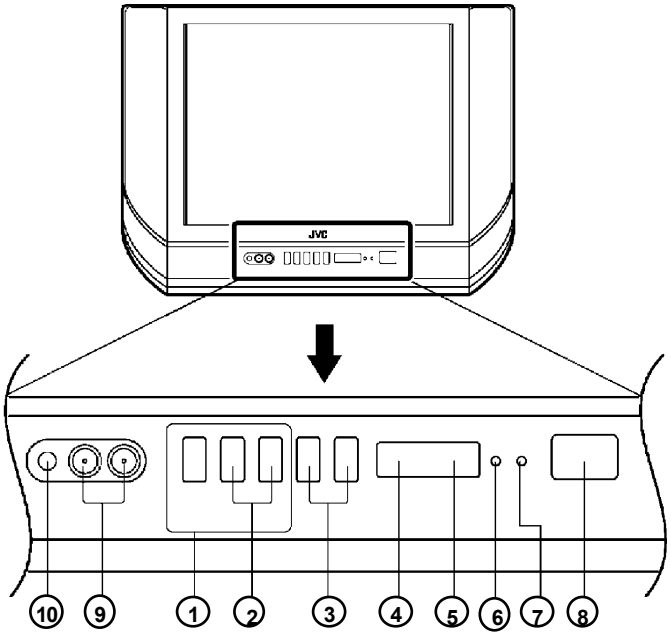
- New chassis design enables use of an interactive on-screen control.
- Wide range voltage (110V～240V) AC power input.
- With AUDIO / VIDEO INPUT & OUTPUT terminal.
- MUTING button can reduce the audio level to zero instantly.
- Functional remote control to operate TV set (for channel select, volume control, power ON/OFF, etc.) from a distance.
- I^2C bus control utilizes single chip ICs for IF, V/C, DEF. VSM PRESET, PRESET & SETUP TOUR.
- By means of AUTO PROGRAM, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.
- The TELETEXT SYSTEM has a built-in FLOP system. (Only for AV-21FR3)
- Built-in ECO MODE (ECONOMY, ECOLOGY)
  In accordance with the brightness in a room, the brightness and / of contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
- Built – in ON TIMER, RETURN + & CHILD LOCK.

SYSTEM BLOCK DIAGRAM



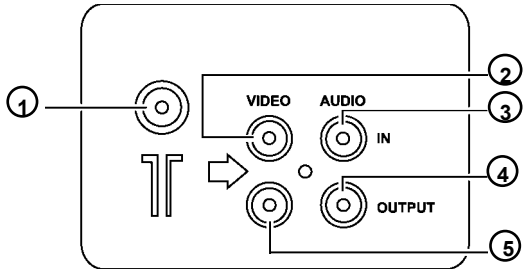
FUNCTIONS

■ FRONT PANEL



①	MENU buttons
②	CHANNEL −/+ buttons
③	VOLUME −/+ buttons
④	AI ECO sensor
⑤	REMOTE CONTROL sensor
⑥	ON TIMER lamp
⑦	POWER lamp
⑧	MAIN POWER button
⑨	A/V INPUT terminal
⑩	HEADPHONE jack

■ REAR TERMINAL

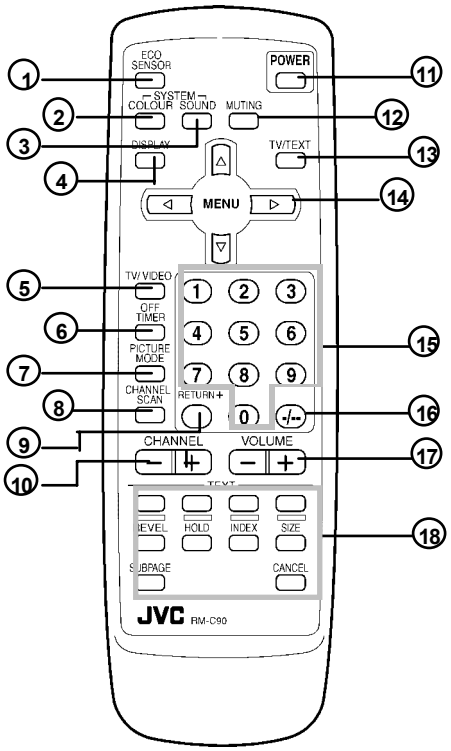


①	ANT Terminal
②	VIDEO INPUT Terminal
③	VIDEO OUTPUT Terminal
④	AUDIO INPUT Terminal
⑤	AUDIO OUT PUT Terminal

AV-21F3
AV-21FR3
AV-21FMG3B

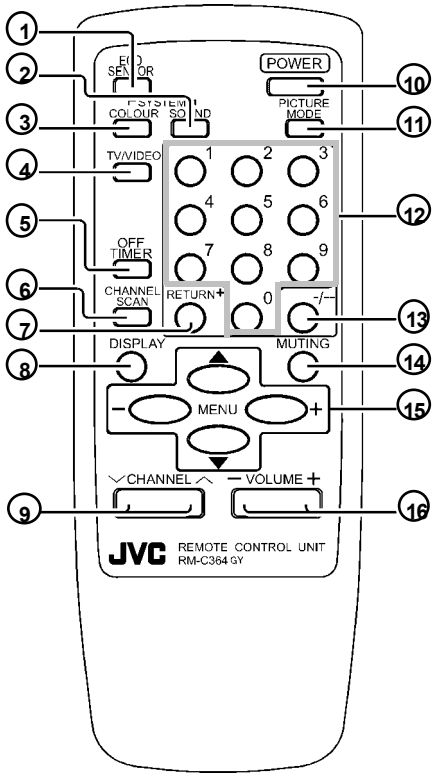
■ REMOTE CONTROL UNIT

RM-C90 : AV-21FR3



1	ECO SENSOR key
2	COLOUR SYSTEM key
3	SOUND SYSTEM key
4	DISPLAY key
5	TV/VIDEO key
6	OFF TIMER key
7	PICTURE MODE key
8	CHANNEL SCAN key
9	RETURN＋key
10	CHANNEL －/＋ key
11	POWER key
12	MUTING key
13	TV/TEXT key
14	MENU key MENU ▲/▼ key MENU◀ /▶ key
15	Number (CH.) key
16	－/－－key
17	VOLUME －/＋ key
18	Teletext key

RM-C364GY : AV-21F3　RM-C364 : AV-21FMG3B



1	ECO SENSOR key
2	SOUND SYSTEM key
3	COLOUR SYSTEM key
4	TV/VIDEO key
5	OFF TIMER key
6	CHANNEL SCAN key
7	RETURN+key
8	DISPLAY key
9	CHANNEL key
10	POWER key
11	PICTURE MODE key
12	Number (CH.) key
13	－/－－key
14	MUTING key
15	MENU key MENU ▲/▼ key MENU －/＋ key
16	VOLUME－/＋ key

Except for difference in body colour, the Remote Control Unit RM-C364GY and RM-C364 have exactly the same Functions.

MAIN DIFFERENCE LIST

Part Name / Model Name	Main PWB	Front Cabinet	Remote Control Unit	Pos,Serial Label
AV-21F3	SCG-1411A-H2	LC10394-038A-H	RM-C364GY-1H	————
AV-21FR3	SCG-1402A-H2	LC10394-037A-H	RM-C90-1H	————
AV-21FMG3B	SCG-1432A-H2	LC10394-039A-H	RM-C364-1H	CM47385-00B-H

Item / Model Name	TV RF System	Colour System	Intermediate Frequency (SIF Carrier)	Teletext System
AV-21F3	B/G, I, D/K	PAL / SECAM	32.5MHz (5.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)	————
AV-21FR3	B/G, I, D/K	PAL / SECAM	↑	FLOP
AV-21FMG3B	B/G, I, D/K,&M	PAL / SECAM NTSC3.58 / NTSC4.43	32.5MHz (5.5MHz) 33.5MHz (4.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)	————

AV-21F3
AV-21FR3
AV-21FMG3B

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power plug.
2. As shown in figure, remove the **6** screws marked Ⓐ and a screw marked Ⓑ .
3. Withdraw the rear cover toward you.

REMOVING THE MAIN PW BOARD

- After removing the rear cover.

1. Slightly raise the both sides of the MAIN PW BOARD by hand.
2. Withdraw the MAIN PW BOARD backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. As shown in figure, remove the **2** screws marked Ⓒ .
2. Follow the same steps when removing the other hand speaker.

CHECKING THE MAIN PW BOARD

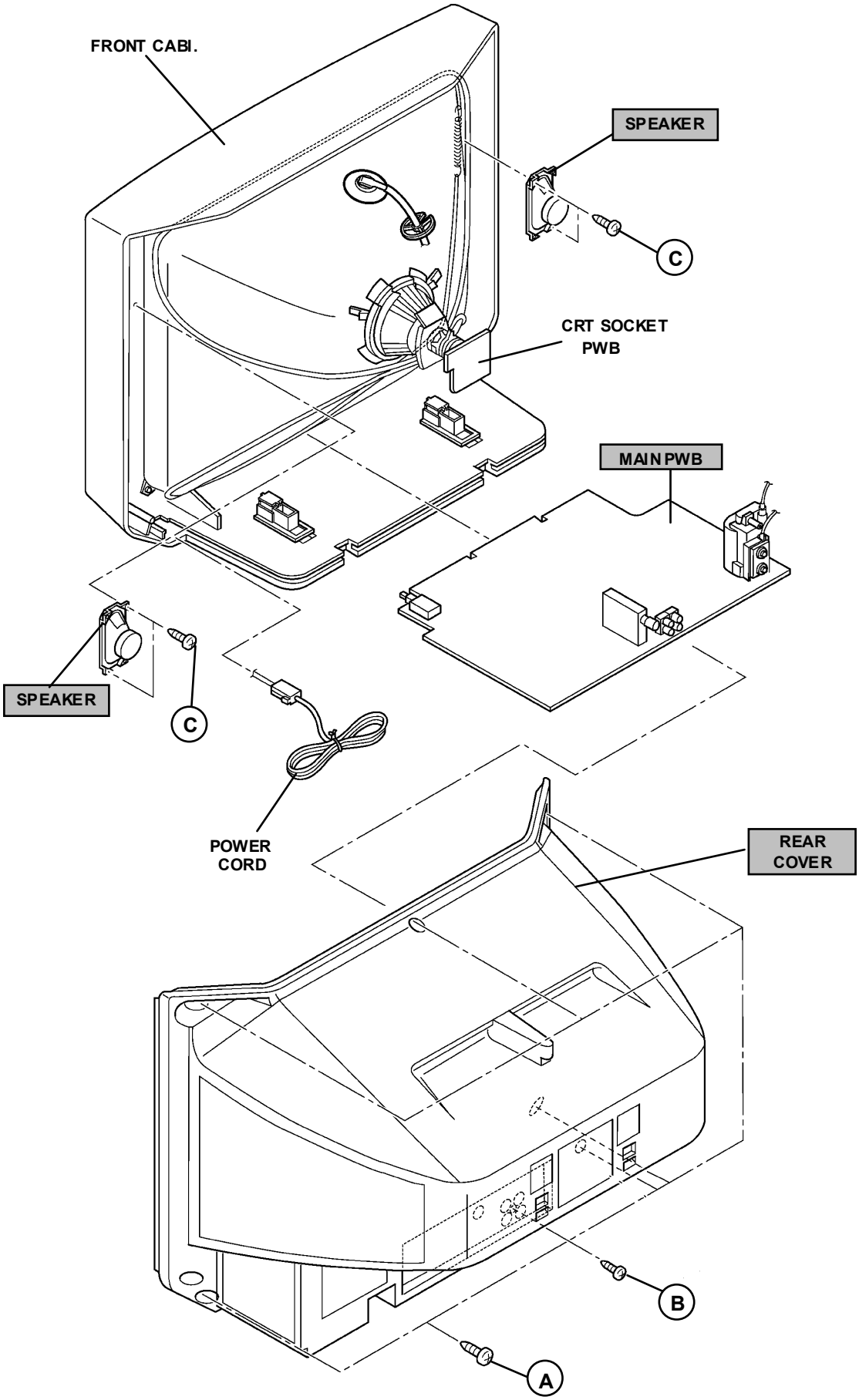
1. To check the back side of the PW Board.
   1) Pull out the MAIN PW Board. (Refer to REMOVING THE MAIN PW Board)
   2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connector are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.


FRONT CABI.
SPEAKER
C
CRT SOCKET PWB
MAIN PWB
SPEAKER
C
POWER CORD
REAR COVER
B
A

AV-21F3
AV-21FR3
AV-21FMG3B

REPLACEMENT OF MEMORY ICs

1. MEMORY ICs

This model uses memory ICs. This memory IC data are for proper operation of the video and deflection circuits.
When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. PROCEDURE FOR REPLACING MEMORY ICs

(1) Power off

Switch the power off and disconnect the power plug from the wall outlet.

(2) Replace ICs

Be sure to use memory ICs written with the initial data values.

(3) Power on

Connect the power plug into the wall outlet and switch the power on.

(4) Check and set SYSTEM CONSTANT SET

• It must not adjust without adjustment signals.

1) Press the **DISPLAY** key and the **PICTURE MODE** key of the REMOTE CONTROL UNIT simultaneously.
2) The SERVICE MENU screen of Fig. 1 will be displayed.
3) While the SERVICE MENU is displayed, again press the **DISPLAY** key and **PICTURE MODE** key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed.
4) Check the setting values of the SYSTEM CONSTANT SET of Table 1 If the value is different, select the setting item with the **MENU** ▼/▲key, and set the correct value with the **MENU** - / + key.
5) Press the **DISPLAY** key twice, and return to the normal screen.

(5) Receive channel of setting

Refer to the **OPERATING INSTRUCTIONS** and set the receive channels (channels preset) as described

(6) User Setting

Check the user setting value of Table 2, and if setting value is different, set the correct value.

For setting, refer to the **OPERATING INSTRUCTIONS**.

(7) Setting of SERVICE MENU

Verify the setting items of the SERVICE MENU, and reset where necessary.

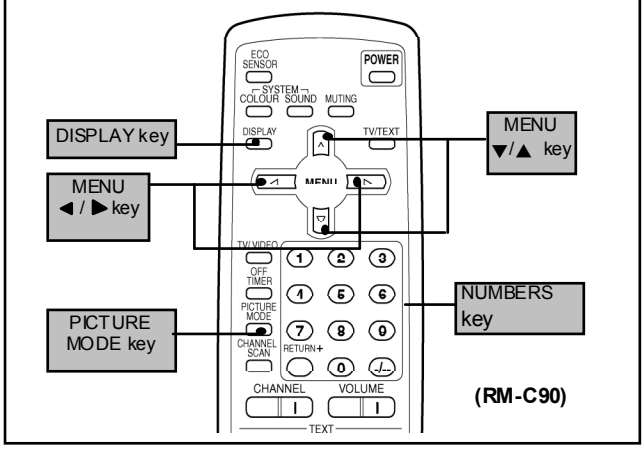
For setting, refer to the **SERVICE ADJUSTMENTS**.

NOTE

Although the key position of the **RM-C90** remote control unit is different from that of the **RM-C364GY** & **RM-C364** remote control unit, the functions of both units are the same So please use the attached diagram for the **RM-C90** remote control unit for the **RM-C364GY** & **RM-C364**.

By the way, **MENU -/+ Key** functions in the same manner as for ◀ /▶key.

KEY ASSIGNMENT OF REMOTE CONTROL UNIT



(RM-C90)

```
SERVICE MENU
1.IF          2.V/C
3.DEF         4.VSM PRESET
5.PRESET
6.SETUP TOUR OFF

1-6 SELECT          DISP : EXIT
**********          **.***
   ***  **  ****  ***
```

Fig.1

SYSTEM CONSTANT- I

```
SYSTEM CONSTANT SET        1
☞ COLOUR          : ***
  BILINGUAL       : NO
  TUNER           : MU
  ECO SENSOR      : YES
  LANGUAGE        : ***

▼/▲ : SELECT
- / + : OPERATE    DISP : EXIT
```

SYSTEM CONSTANT- II

```
SYSTEM CONSTANT SET        2
☞ B/B SOUND       : OFF
  LOCK            : 180
  COLOUR AUTO     : NO
  QSS             : MINT
  ALC             : NO
  TEXT RATE       : 20
▼/▲ : SELECT
- / + : OPERATE    DISP : EXIT
```

SYSTEM CONSTANT- III

```
SYSTEM CONSTANT SET        3
☞ AMP TUNER       : NO
  VNR             : YES
  TEXT TABLE      : CYL
  VOLUM PWM       : POS

▼/▲ : SELECT
- / + : OPERATE    DISP : EXIT
```

Fig.2

SETTING OF SYSTEM CONSTANT SET

Setting item	Setting contents	Setting value		
		AV-21F3	AV-21FR3	AV-21FMG3B
COLOUR	MULTI. → TRIPLE → PAL	TRIPLE.	←	MULTI
BILINGUAL	YES → NO	NO	←	←
TUNER	MU → MA	MU	←	←
AI ECO SENSOR	YES → NO	YES	←	←
LANGUAGE	E/R/A/P → E/R	E/R	←	E/R/A/P
B/B SOUND	ON → OFF	OFF	←	←
LOCK	YES ↔ 10 ↔ 20 ↔ ~ ↔ 230 ↔ 240 ↔ 250	180	←	←
COLOUR AUTO	YES → NO	NO	←	←
QSS	MINT → MQSS	MINT	←	←
ALC	YES → NO	NO	←	←
TEXT RATE	10 ↔ 20 ↔ 40 ↔ 80	20	←	←
AMP TUNER	YES → NO	NO	←	←
VNR	YES → NO	YES	←	←
TEXT TABLE	ARA → CYL	CYL	←	←
VOLUM PWM	POS → NEG	POS	←	←

Table 1

USER SETTING VALUES

Setting item	Setting value	Setting item	Setting value
SUB POWER	ON	LANGUAGE	ENGLISH
CHANNEL POSITION	1 POSITION	CHANNEL PRESET	Refer to OPERATING INSTRUCTION
VOLUME	About 10	AI ECO SENSOR	OFF
TV/VIDEO	TV	VNR	OFF
ON SCREEN DISPLAY	POSITION INDICATION	AUTO SHUTOFF	OFF
COLOUR SYSTEM	PAL	ON TIMER	PR1 0:00
SOUND SYSTEM	B / G	BLUE BACK	OFF
OFF TIMER	OFF OSD. Shows 00	CHILD LOCK	OFF
PICTURE MODE (VSM)	BRIGHT		

Table 2

AV-21F3
AV-21FR3
AV-21FMG3B

INITIAL SETTING VALUE OF SERVICE MENU

1. Adjustment of the SERVICE MENU is made on the basis of the initial setting values ; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
2. Do not change the initial Setting Values of the Setting (Adjustment) items not listed In "ADJUSTMENT".

2. V/C

Setting item \ Colour system		Variable range	Initial setting value			
			PAL	SECAM	NTSC 3.58	NTSC 4.43
1. CUT OFF	RED / GREEN / BLUE	-128～+127	-50	←	←	←
2. DRIVE	RED / BLUE	-128～+127	+ 0	←	←	←
3. BRIGHT		-127～+127	+ 0	←	←	←
4. CONT.		-63～+63	+ 0	←	←	←
5. COLOUR		-63～+63	+ 0	←	←	←
6. TINT	TV	-63～+63	—	—	+ 0	+ 0
	VIDEO AV-21F3 AV-21FR3		—	—	+0	+ 0
	VIDEO AV-21FMG3B		—	—	+8	+ 0
7. SECAM BL ADJ.		-31～+31	+ 0	←	←	←
8. SHARP Do Not Adj.	TV	-32～+31	- 8(Fixed)	←	←	←
	VIDEO		+15(Fixed)			

3. DEFLECTION

Setting item	Variable range	Initial setting value	
		fv : 50Hz MODE	fv : 60Hz MODE
1. VER. POSITION	-04 ～ +03	- 2	- 3
2. HOR. POSITION	-16 ～ +15	+1	+ 4
3. VER. HEIGHT	-64 ～ +63	-40	+ 0
4. VER. LINEARITY	-32 ～ +31	+13	- 3
5. VER. SWCURVE	-32 ～ +31	-32	+ 0
6. HOR. VCO ADJUST Do Not Adj.	-63 ～ +62	+ 0	+ 0

4.VSM PRESET

VSM preset mode / VSM Setting item	BRIGHT	STANDARD	SOFT
TINT SETTING VALUE	+15	←	←
COLOUR SETTING VALUE	+15	←	←
BRIGHT SETTING VALUE	+15	←	←
CONT. SETTING VALUE	+30	+15	+11
SHARP SETTING VALUE	+15	←	+12

5. PRESET

The items in the following table, it is no requirement for adjustment.
If values had changed by the miss operation, set the initial setting values in the following table.

Colour System **Do Not Adjust**

Setting item		Initial setting value (Fixed value)			
		PAL	SECAM	NTSC 3.58	NTSC 4.43
1. C TRAP FIX		1	1	1	1
2. SHARP PEAK		0	0	0	0
3. ABL		1	1	1	1
4. GAMMA		0	0	0	0
5. Y. DELAY TIME	TV	0	2	2	3
	VIDEO	0	2	0	2
6. BLACK EXP START		+3	+3	+3	+3
7. C-BPF	TV	1	1	0	0
	VIDEO	1	1	1	1
8. CW / SCP		0	0	0	0
9. VIF DET LEVEL		0	0	0	0
11. IF AGC MIN		0	0	0	0
12. VIF AGC		0	0	0	0
13. VIF PMOD		0	0	0	0
19. VNR		15	15	15	15
20. RGB LIM		1	1	1	1
21. RGB LIMIT LEVEL		2	2	2	2
23. TEXT H. POSITION		-3	-3	-3	-3
24. READ DATA		———	———	———	———

Sound System **Do Not Adjust**

Setting item	B/G	I	D/K	M
10. SIF DET LEVEL	+0	+0	+0	+0
14. SIF BPF BW ADJUST	+0	+0	+0	+0
15. SIF TRAP FO ADJUST	+0	+0	+0	+0
16. SIF TRAP FO ADJUST 2	+0	+0	+0	+0
17. SIF -TRAP	0	0	0	0
18. SIF -BPF	1	0	0	0
22. SIF SW	0	1	1	1

AV-21F3
AV-21FR3
AV-21FMG3B

REPLACEMENT OF IC301 (IF V/C DECODER)

- **For the IC301(IF V/C DECODER) of this model, all data are written in the micro-computer. So, write the data in the micro-computer in accordance with the following procedures before starting adjustment.**

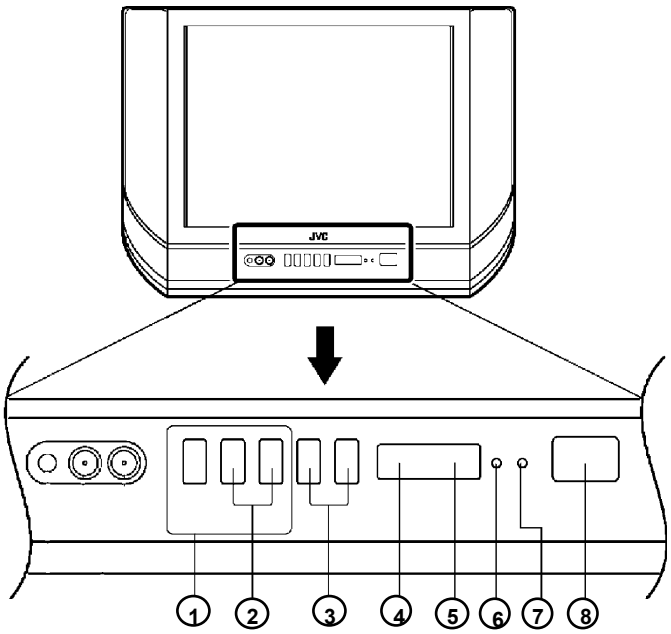
PROCEDURES

(1) Turn the POWER OFF.

(2) Replace the IC301 with a new one.

(3) While pressing MENU button and VOL+ button ON the FRONT CABINET simultaneously, turn the POWER ON. When the POWER is turned ON, the data is written in the micro-computer immediately.

LOCATIONS OF FRONT PANEL BUTTONS AND LAMPS



1	MENU buttons
2	CHANNEL −/+ buttons (MENU −/+ buttons)
3	VOLUME −/+ buttons (MENU −/+ buttons)
4	AI ECO sensor
5	REMOTE CONTROL sensor
6	ON TIMER lamp
7	POWER lamp
8	MAIN POWER button

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 way of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.**
2. **The adjustment with the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to its optimum condition may differ from the initial setting values.**
3. Make sure that connection is correctly made to AC power source.
4. Turn on the power of the set and equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. **Never touch any adjustment parts, which are not specified in the list for this adjustment VRs, transforms, condensers, etc.**
7. Preparation for adjustment
   Unless otherwise specified in the adjustment instructions, preset the following functions with the REMOTE CONTROL UNIT.
   User mode position

PICTURE MODE (VSM)	BRIGHT
VNR	OFF
TINT / COLOUR / BRIGHT CONT. / SHARP	CENTER
BLUE BACK	OFF
OFF TIMER	OFF
AI ECO SENSOR	OFF
AUTO SHUT OFF	OFF

MEASURING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL / SECAM / NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

Adjustment item	Adjustment item
B1 POWER SUPPLY	DEFLECTION circuit adjustment
FOCUS adjustment	VSM PRESET setting
IF circuit adjustment	PURITY/ CONVERGENCE adjustment
V/C (Video / Chroma) circuit adjustment	

BASIC OPERATION OF SERVICE MENU

- **The adjustment using SERVICE MENU**

The following adjustment items use the SERVICE MENU in the series of the adjustment. The adjustments are made on the basis of the initial setting values. The adjustment values which adjust the screen to the optimum condition can be different from the initial setting values. With the SERVICE MENU, various settings can be made, and they are broadly classified in the following items of settings.

1.IF ····· Adjustment of the IF circuits.
2.V/C ····· Adjustment of the VIDEO/CHROMA circuit.
3.DEF ····· Adjustment of the DEFLECTION circuit.
4.VSM PRESET ····· Adjustment of the initial setting values of VSM condition as STANDARD, SOFT and BRIGHT. (VSM : Video Status Memory)
5.PRESET ····· Adjustment of the RF circuit **[Do not adjust]**.
6.SETUP TOUR OFF ····· It should be able to select mode (LANGUAGE and AUTO CH PRESET). **[Should be OFF]**.

- **Key operation of the SERVICE MENU**

[Enter to SERVICE MENU]

Press the **DISPLAY** key and the **PICTURE MODE** key of the REMOTE CONTROL UNIT simultaneously. Then enter the SERVICE MENU mode as shown in Fig.1.

[Exit from SERVICE MENU]

When complete the adjustment work, press the **DISPLAY** key to return to the SERVICE MENU.
And then press the **DISPLAY** key again, return to the normal screen.

[Select from SERVICE MENU]

In SERVICE MENU, press the number (1～6) key of the remote control unit, to select any of the adjustment items.
The colours which selected item characters are changed.

SERVICE MENU

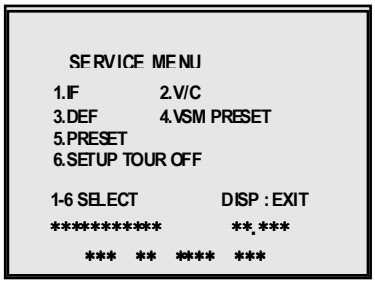
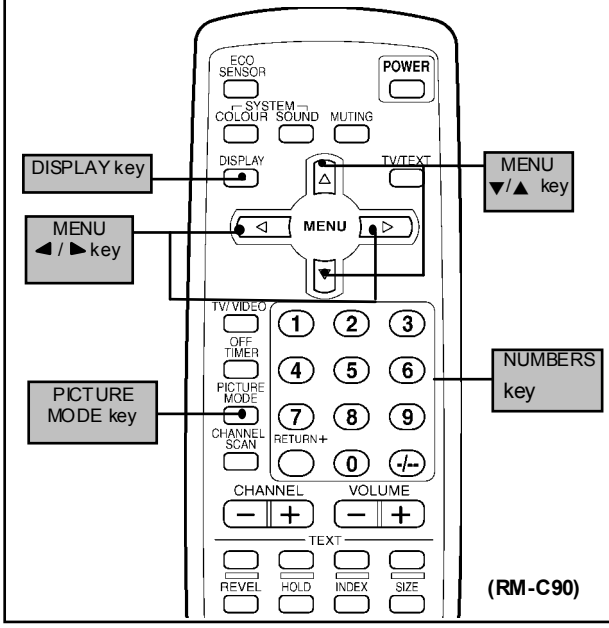


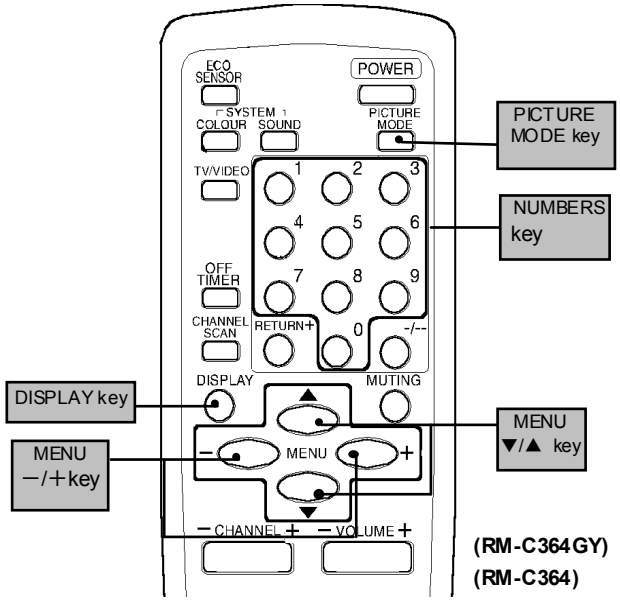
Fig.1

KEY ASSIGNMENT OF REMOTE CONTROL UNIT



(RM-C90)

KEY ASSIGNMENT OF REMOTE CONTROL UNIT



(RM-C364GY)
(RM-C364)

Except for difference in body colour, the Remote Control Unit RM-C364GY and RM-C364 have exactly the same Functions.

[Method of setting]

1. IF

[1. VCO]

① 1 Key ····· Select **1.IF**.
② 1 Key ····· Select **1.VCO**
③ The VCO (CW) screen will be displayed a allow mark when the AFC voltage is at a certain level.
④ DISPLAY Key ····· As you press this key twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ····· Select **1.IF**.
② 2 Key ····· Select **2.DELAY POINT**.
③ MENU -/+ Key ····· Set (adjust) the setting values of the setting items.
④ DISPLAY Key ····· When this is pressed twice, you will return to the **SERVICE MENU**.

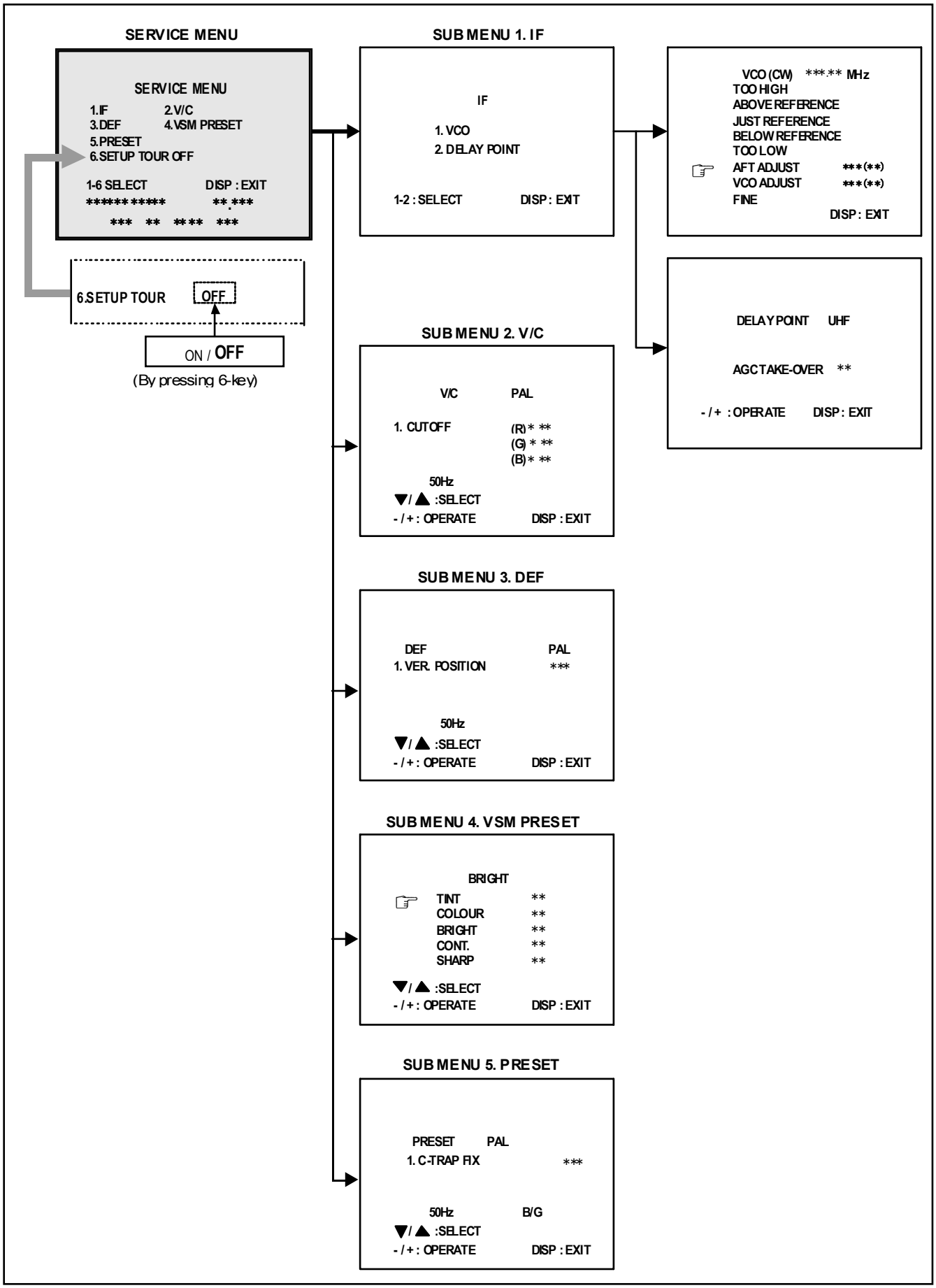
2.V/C, 3.DEF and **4.VSM PRESET**

① 2~4 Key ····· Select one from **2. V/C, 3. DEF** and **4. VSM PRESET**.
② MENU ▼/▲ Key ····· Select setting items.
③ MENU -/+ Key ····· Adjust the values of the items.
④ DISPLAY Key ····· When this is pressed, return to the **SERVICE MENU**.

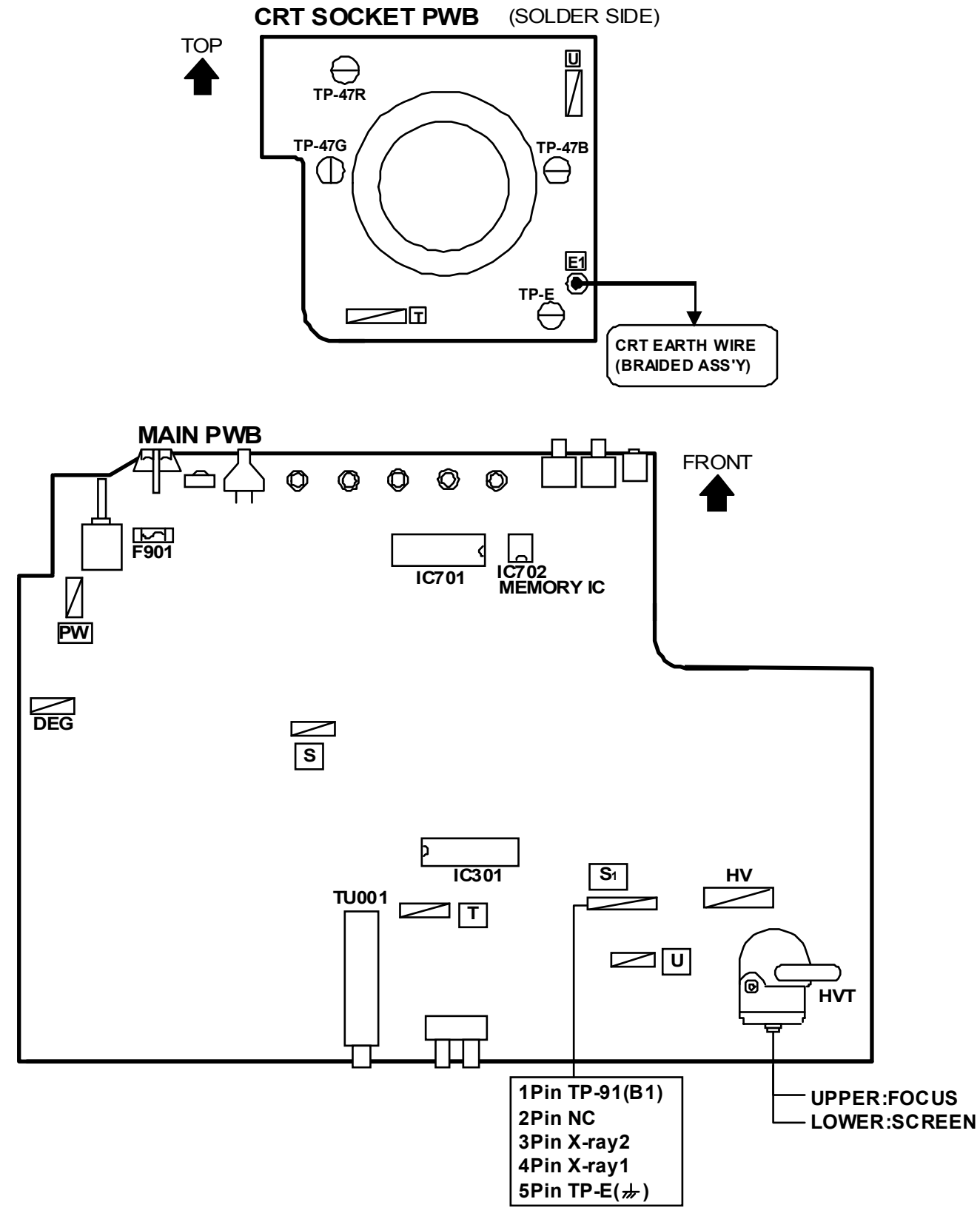
6.SETUP TOUR

① By pressing the 6 key, you can change the ON or OFF (**should be OFF**).
(Should be OFF)
✻ · If it is ON, then you turn the TV power off, when you are turn the TV power on again. The JVC's logo will be shown about 15 seconds automatically.
② MENU -/+ Key ····· Select Language.
③ MENU ▼ Key ····· Auto Search.

SERVICE MENU FLOW CHART



ADJUSTMENT LOCATIONS



ADJUSTMENTS

B1 POWER SUPPLY

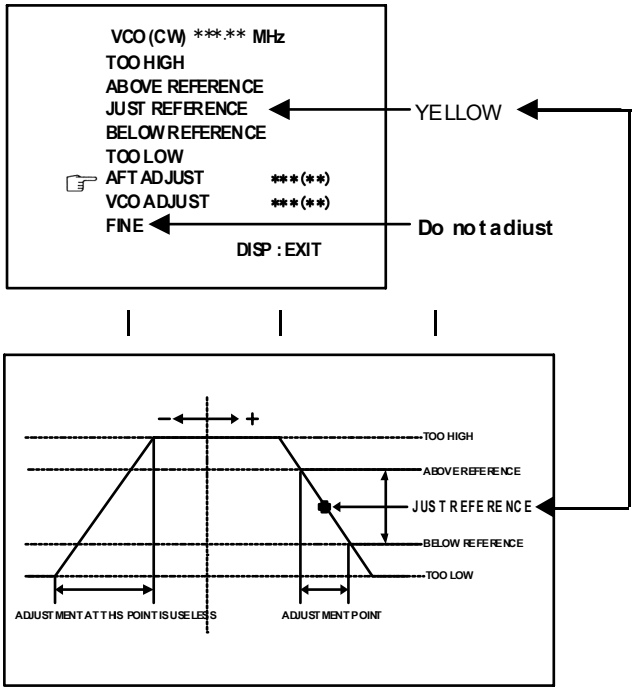
Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power Supply	Signal generator DC Volt-meter	TP-91 (B1) TP-E (⏚)		1. Input a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E (⏚). 3. Make sure that the voltage is DC116.5±2.0V.

FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	Signal generator		FOCUS VR [In HVT]	1. Input a cross-hatch signal. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.

IF CIRCUIT ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VCO(CW)	Signal generator Remote control unit		1. VCO	●Please use signal generator which is correct proof about the sending frequency. 1. Input the PAL full colour bar (210.25MHz) signal. 2. Enter the SERVICE MENU. 3. Select 1.IF from the SERVICE MENU. 4. Press 1 key and select **1. VCO**. 5. Select **VCO ADJUST** with MENU ▲/▼ key. 6. Press MENU -/+ key until the colour of the characters TOO HIGH changes blue to yellow. Then gradually press the MENU -/+ key until the TOO LOW changes yellow. At this time, confirm that the value of **VCO ADJUST** is near +00. 1. Select **AFT ADJUST** with MENU ▲/▼ key. 8. Press MENU -/+ key until the characters JUST REFERENCE changes blue to yellow. 9. Press the **DISPLAY** key three times to return to normal screen.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of DELAY POINT (AGC)	**Signal generator** **Remote control unit**		**DELAY POINT (AGC TAKE-OVER)**	1. Input a black and white signal (colour off). 2. Enter the SERVICE MENU. 3. Select **1. IF** from the SERVICE MENU. 4. Select **2. DELAY POINT** by pressing the **2** key on the remote control unit. 5. Set the setting values of the setting items as shown bellow table. 6. Then adjust the MENU - or + key until video noise disappears. 7. Turn to other channels and make sure that there are no irregularities.

DELAY POINT UHF

AGC TAKE-OVER **

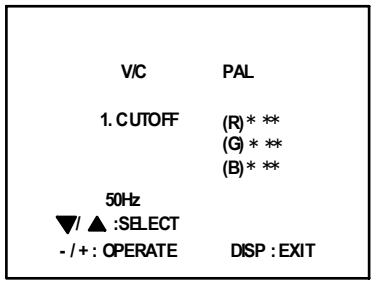
-/+ : OPERATE DISP : EXIT

Setting Item		Variable range	Initial setting value		
			MATSUSHITA (QAU0287-001)	MURATA (QAU0185-004)	ALPS (QAU0282-001)
DELAY POINT (AGC TAKE OVER)	**NTSC 3.58**	0～127	45	45	47
	OTHER		35	45	35

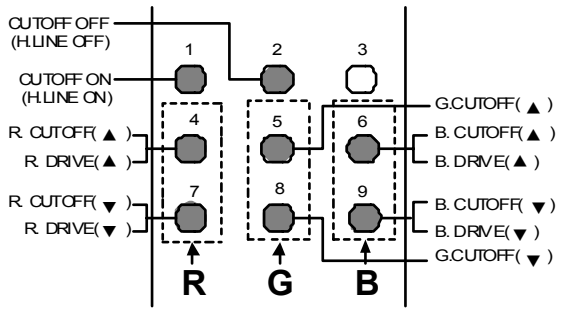
VIDEO / CHROMA CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
Do not change the initial setting values of the setting items not listed in "ADJUSTMENT".

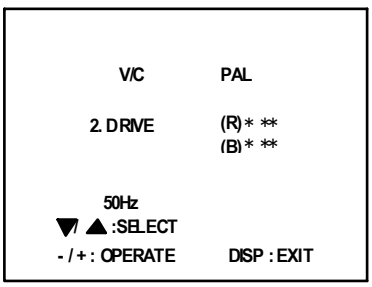
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE (Low light)	**Signal generator** **Remote control unit**		**1. CUT OFF (R)** **CUT OFF (G)** **CUT OFF (B)** **SCREEN VR [IN HVT]**	1. Input a black and white signal (colour off). 2. Enter the SERVICE MENU. 3. Select **2. V/C** from the SERVICE MENU, then select **1. CUT OFF** (R), (G) and (B) . 4. Set each value to initial setting value with 4～9 keys of the remote control unit. 5. Press the **1** key of the remote control unit to show the single horizontal line on screen. 6. Turn the **SCREEN VR** fully counter-clockwise, then slowly turn it clockwise to where one of a red, blue or green colour is faintly visible. 7. Use keys **4～9** of the remote control unit and adjust the other 2 colours which except the appeared colour to where the single horizontal line appears white. 8. Turn the **SCREEN VR** to where the single horizontal line glows faintly. 9. Press the **2** key to turn off the single horizontal line. 10. Press the DISPLAY key twice to return to the normal screen.
Adjustment of WHITE BALANCE (High light)	**Signal generator** **Remote control unit**		**2. DRIVE (R)** **DRIVE (B)**	1. Input a black and white signal (colour off). 2. Enter the SERVICE MENU. 3. Select **2. V/C** from the SERVICE MENU. 4. Select **2. DRIVE (R) / (B)** with MENU ▼/▲ key, and set each value to initial setting value with 4 and 7 or 6 and 9 keys of the remote control unit. 5. Use the keys **4** and **7** or **6** and **9** to produce a white screen 6. Press the DISPLAY key twice to return to the nomal screen.



KEY ASSIGNMENT OF REMOTE CONTROL UNIT



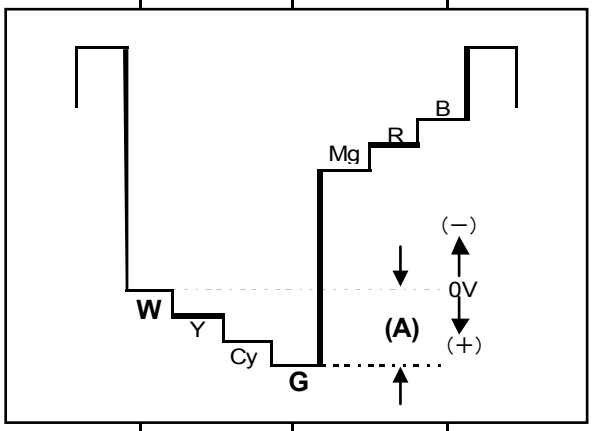
Adjustment item		Variable range	Initial setting value
1. CUT OFF	R	-128～+127	-50
	G	-128～+127	-50
	B	-128～+127	-50



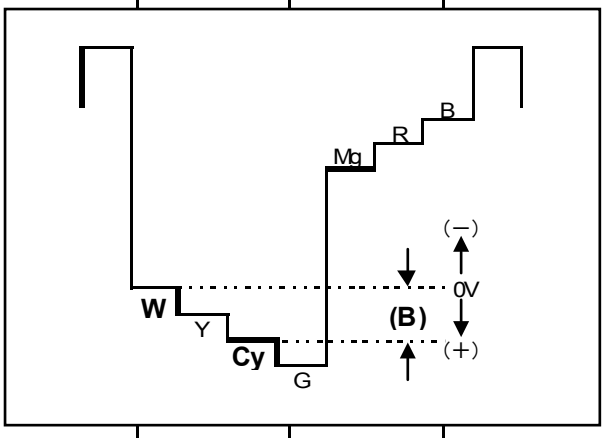
Adjustment item		Variable range	Initial setting value
2. DRIVE	R	-128～+127	+0
	B	-128～+127	+0

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB BRIGHT	**Remote control unit**		**3. BRIGHT**	1. Receive any broadcast. 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 4. Select **3. BRIGHT** with the MENU ▼/▲key. 5. Set the initial setting value with the MENU - / + key. 6. If the brightness is not the best with the initial set value, make fine adjustment until you get the best brightness.
Adjustment of SUB CONT.	**Remote control unit**		**4. CONT.**	1. Receive any broadcast. 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 1. Select **4. CONT**. with the MENU ▼/▲key. 5. Set the initial setting value with the MENU - / + key. 6. If the contrast is not the best with the initial set value, make fine adjustment until you get the best contrast.
Adjustment of SUB COLOUR I	**Remote control unit**		**5. COLOUR**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	1. Receive a PAL broadcast. 2. Enter the SERVICE MENU. 3. Select **2. V/C** from the SERVICE MENU. 4. Select **5. COLOUR** with the MENU ▼/▲ key. 5. Set the initial setting value for PAL COLOUR with the MENU - / + key. 6. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour.
			SECAM COLOUR	1. Receive a SECAM broadcast. 2. Make fine adjustment of SECAM COLOUR as previously.
			NTSC 3.58 COLOUR	1. Receive a NTSC 3.58MHz broadcast. 2. Make similar fine adjustment of NTSC 3.58 COLOUR as previously.
			NTSC 4.43 COLOUR	When NTSC 3.58 adjustment completed, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR Ⅱ	**Signal generator** **Oscillo-scope** **Remote control unit**	**TP-47G/R** **TP-E (⏚)** **[CRT SOCKET PWB]**	**5. COLOUR**	**[Method of adjustment using measuring instrument]**
			PAL COLOUR	1. Input a PAL full field colour bar signal (75% white). 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 4. Select **5. COLOUR** with the MENU ▼/▲ key. 5. Set the initial setting value of PAL COLOUR with the MENU - / + key. 6. Connect the oscilloscope between TP-47G/R and TP-E (⏚). 7. Adjust PAL COLOUR to bring the value of **(A)** in the illustration to +12V(W-G). (Voltage value between (**W**) and (**G**))
			SECAM COLOUR	1. Input a SECAM full field colour bar signal (75% white). 2. Set the initial setting value of SECAM COLOUR with the MENU - / + key. 3. Adjust SECAM COLOUR to bring the value of **(A)** in the illustration to +8V(W-G). (Voltage value between (**W**) and (**G**))
			NTSC 3.58 COLOUR	1. Input a NTSC 3.58 full field colour bar signal (75% white). 2. Set the initial setting value of NTSC 3.58 COLOUR with the MENU - / + key. 3. Adjust NTSC 3.58 COLOUR to bring the value of **(A)** in the illustration to +11V(W-G). (Voltage value between (**W**) and (**G**))
			NTSC 4.43 COLOUR	When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

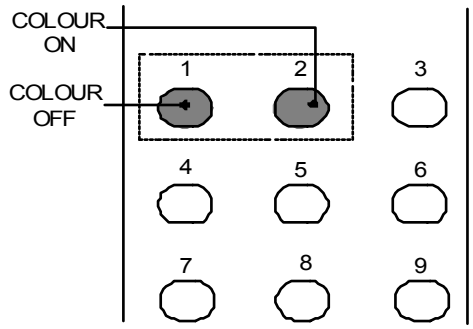


Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of TINT Ⅰ	**Signal generator** **Remote control unit**		**6. TINT**	**[Method of adjustment without measuring instrument]**
			NTSC 3.58 TINT	1. Input a NTSC 3.58 full field colour bar signal (75% white). 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 4. Select **6. TINT** with the MENU ▼/▲ key. 5. Set the initial setting value of NTSC 3.58 with the MENU - / + key. 6. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint.
			NTSC 4.43 TINT	When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of TINT Ⅱ	**Signal generator** **Oscillo-scope** **Remote control unit**	**TP-47G/R** **TP-E (⏚)** **[CRT SOCKET PWB]**	**6. TINT**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 TINT	1. Input a NTSC 3.58 full field colour bar signal (75% white). 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 4. Select **6. TINT** with the MENU ▼/▲ key. 5. Set the initial setting value of NTSC 3.58 with the MENU - / + key. 6. Connect the oscilloscope between TP-47G/R and TP-E. (⏚). 7. Adjust NTSC 3.58 TINT to bring the value of **(B)** in the illustration +9V(W- **Cy**). (Voltage value between (**W**) and (**Cy**))
			NTSC 4.43 TINT	When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SECAM BLACK OFFSET	**Remote control unit** **Signal generator**		**7.SECAM BL ADJUST**	**[Method of adjustment using measuring instrument]** 1. Input a SECAM full field colour bar signal. 2. Enter the SERVICE MENU. 3. Select **2. V/C** from SERVICE MENU. 4. Select **7. SECAM BL ADJUST** with MENU ▼/▲ key. 5. Set the initial setting value with the MENU -/ + key. 6. Switch the ①key (colour OFF) and ②key (colour ON) on the remote control and make sure that there is no colour on the black and white screen. 7. If the black and white screen is not best with the initial setting value, make fine adjustment until you get the best black and white screen. 8. While watching the screen, adjust the value to be the same colour between ON & OFF by ten key on the remote control unit. 9. Press the DISPLAY key twice to return to the normal screen.

KEY ASSIGNMENT OF REMOTE CONTROL UNIT



DEFLECTION CIRCUIT ADJUSTMENT

- There are 2 modes of adjustment (setting value) ---- ① 50Hz mode and ② 60Hz mode ---- depending upon the kind of signals (vertical frequency 50Hz / 60Hz).
- When adjusted in mode ① , mode ② will be automatically set.

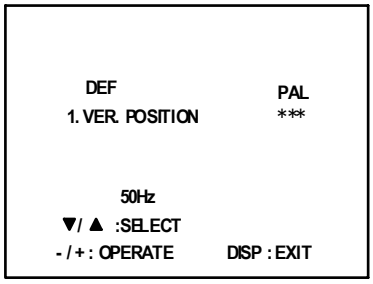
The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of V.HEIGHT & V.POSITION</td><td>Signal generator

Remote control unit</td><td></td><td>1. VER. POSITION
3. VER. HEIGHT</td><td>1. Input a circle pattern signal.
2. Enter the SERVICE MENU.
3. Select 3. DEF. from SERVICE MENU.
4. Select 1. VER. POSITION with the MENU ▼/▲ key.
5. Set the initial setting value with the MENU - / + key.
6. Adjust V and V' to be equal with the MENU - / + key as shown in Fig.2.
7. Input a cross-hatch signal.
8. Select 3. V. HEIGHT with the MENU ▼/▲ key.
9. Set the initial setting value with the MENU - / + key.
10. As shown in Fig.1, adjust VER. HEIGHT and make the vertical screen size 92% of the picture size with the MENU - / + keys of remote control unit.</td></tr>
<tr><td>Adjustment of HOR. POSITION</td><td>Signal generator

Remote control unit</td><td></td><td>2. HOR. POSITION</td><td>11. Input a circle pattern signal.
12. Select 2. HOR POSITION with the MENU ▼/▲ key.
13. Set the initial setting value of 2. HOR. POSITION with the MENU - / + key.
14. Adjust 2. HOR. POSITION to make H=H" as shown in Fig.2 with the MENU - / + key.</td></tr>
</table>

SUB MENU 3. DEF



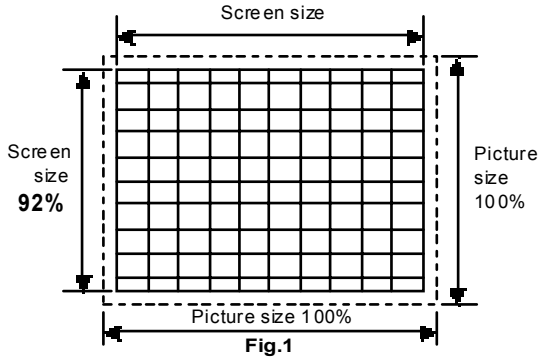


Fig.1

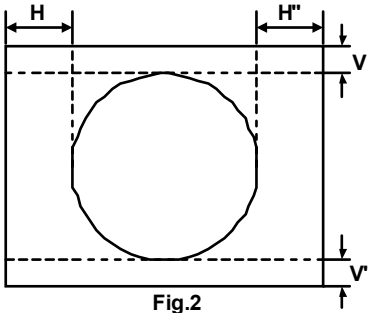


Fig.2

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VER. LIN. & VER. SCURVE	**Signal generator** **Remote control unit**		**4. VER. LIN.** **5. VER. SCURVE**	● **When the vertical linearity has been deteriorated remarkably, perform the following steps.** 15. Input a cross-hatch signal. 16. Select **4. VER. LIN.** with the MENU ▼/▲ key. 17. Set the initial setting value of **4. VER LIN.** with the MENU - / + key. 18. Select **5. VER. SCURVE** with the MENU ▼/▲ key. 19. Set the initial setting value of **5. VER. SCURVE** with the MENU - / + key. 20. Adjust **4. VER. LIN.** and **5. VER. SCURVE** so that the spaces of each line as shown in Fig.3 on **TOP**, **CENTER** and **BOTTOM** become uniform. Make sure that the adjustment is properly done on the screen of 60Hz mode. **[NOTE]** ● Adjust to make both 50Hz & 60Hz are the same v. size and fine straight line. ● When adjust again, adjust 50Hz mode first. ● When adjust in 60Hz mode, only 60Hz mode is adjust.

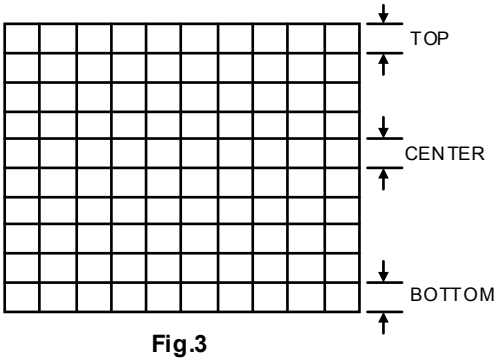
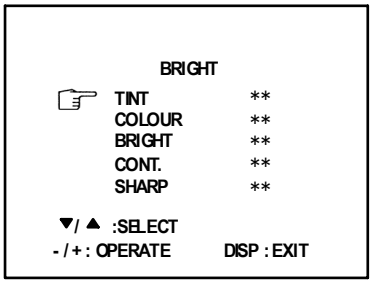


Fig.3

VSM PRESET SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET	**Remote control unit**		**TINT** **COLOUR** **BRIGHT** **CONT.** **SHARP**	1. Enter the SERVICE MENU. 2. Select **4. VSM PRESET** from the SERVICE MENU. 3. Select BRIGHT with the PICTURE MODE key. 4. Adjust the MENU ▼/▲ and MENU - / + key to bring the set values of **TINT ~ SHARP** to the values shown in the below table. 5. Respectively select the VSM PRESET mode for SOFT and STANDARD, and make similar adjustment as in 3 above.



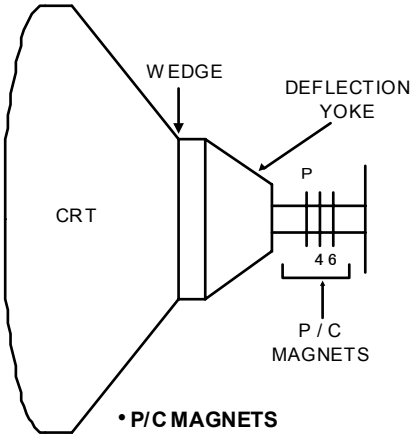
● VSM PRESET

VSM Setting Item	BRIGHT	STANDARD	SOFT
TINT	+15	←	←
COLOUR	+15	←	←
BRIGHT	+15	←	←
CONT	+30	+15	+11
SHARP	+15	←	+12

PURITY / CONVERGENCE ADJUSTMENT

PURITY ADJUSTMENT

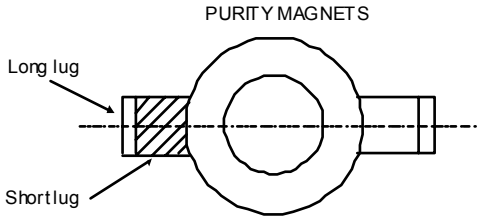
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a cross hatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

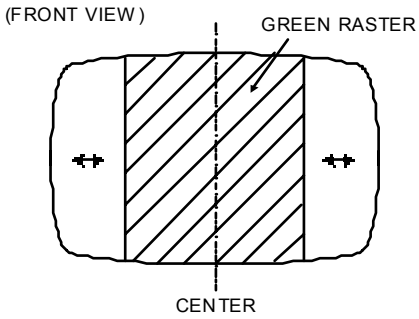


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a cross hatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta(red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

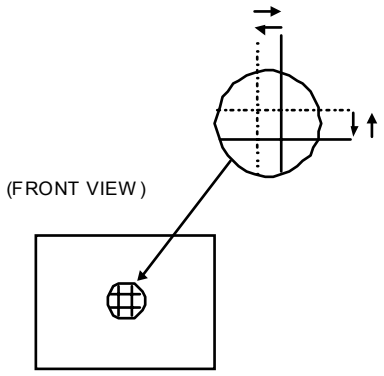


Fig.1

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

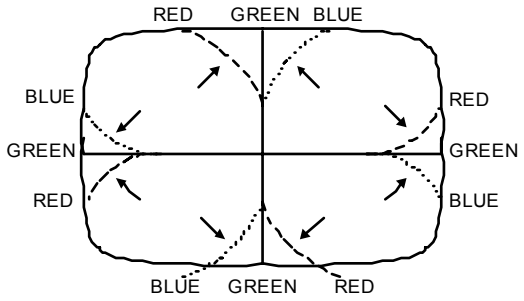


Fig.2

● After adjustment, fix the wedge at the original position.
Fasten the retainer screw of the deflection yoke.
Fix the 6 magnets with glue.

(FRONT VIEW)

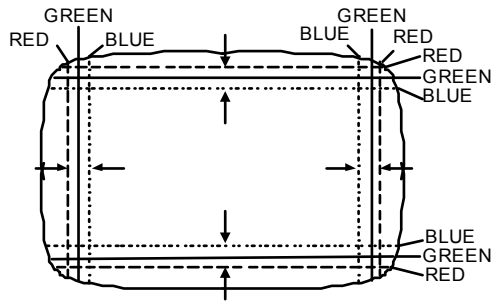


Fig.3

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

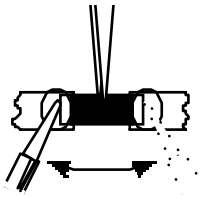
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

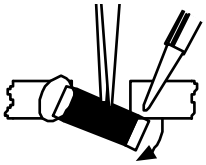
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

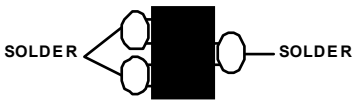


(2) Shift with tweezers and remove the chip part.

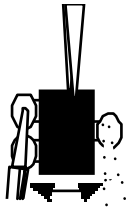


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

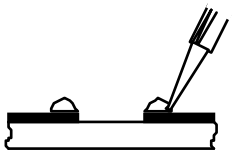


Note : After removing the part, remove remaining solder from the pattern.

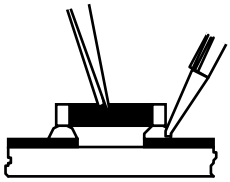
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

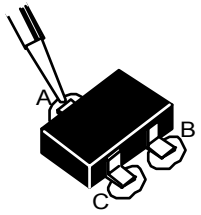


◆ **Transistors, diodes, variable resistors, etc**

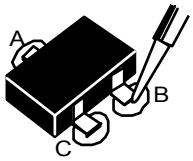
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



JVC

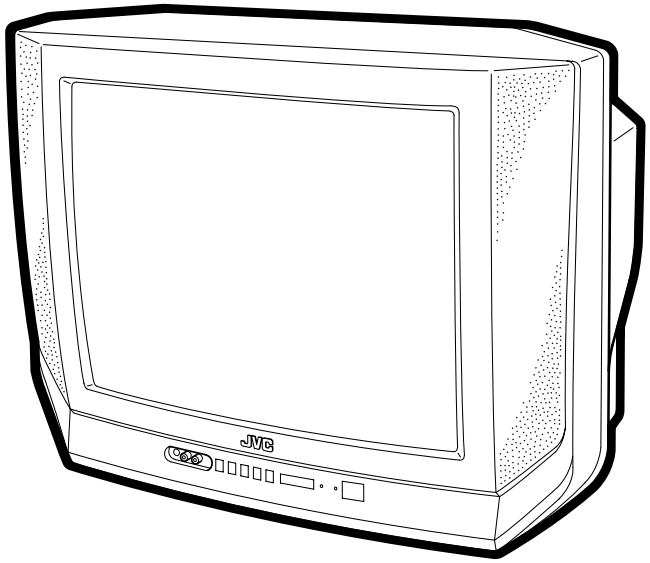
SCHEMATIC DIAGRAMS

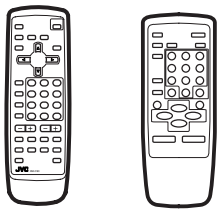
COLOUR TELEVISION

BASIC CHASSIS
CG

AV-21F3
AV-21FR3
AV-21FMG3B

CD-ROM No.SML200207





[RM-C90] [RM-C364]

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- BLOCK DIAGRAM ---------- 2-3
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No.52024
Jun. 2002

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SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
E C B	E C B	B C E (G)(D)(S)	E C B	E C B	CHIP TR C B E

IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
OUT E IN	IN E OUT	1 N	1 N	1 N

CHIP IC

TOP VIEW		
N N N N 1	1 N	

AV-21F3, AV-21FR3, AV-21FMG3B
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ /V
(4)Oscilloscope sweeping time	:H ⇒ 20µS/div :V ⇒ 5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board :R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	:[Ω]
K	:[K Ω]
M	:[M Ω]

● Rated allowable power

No indication	:1/ 16 [W]
Others	:As specified

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[µH]
Others	:As specified

(4)Power Supply

:B1 :B2 (12V)
:9V :5V

∗Respective voltage values are indicated

(5)Test point

:Test point :Only test point display

(6)Connecting method

:Connector :Wrapping or soldering
:Receptacle

(7)Ground symbol

:LIVE side ground
:ISOLATED(NEUTRAL) side ground
:EARTH ground
:DIGITAL ground

(2)Capacitors

● Capacitance value

1 or higher	:[pF]
less than 1	:[µF]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [µF]/withstand voltage[V]

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

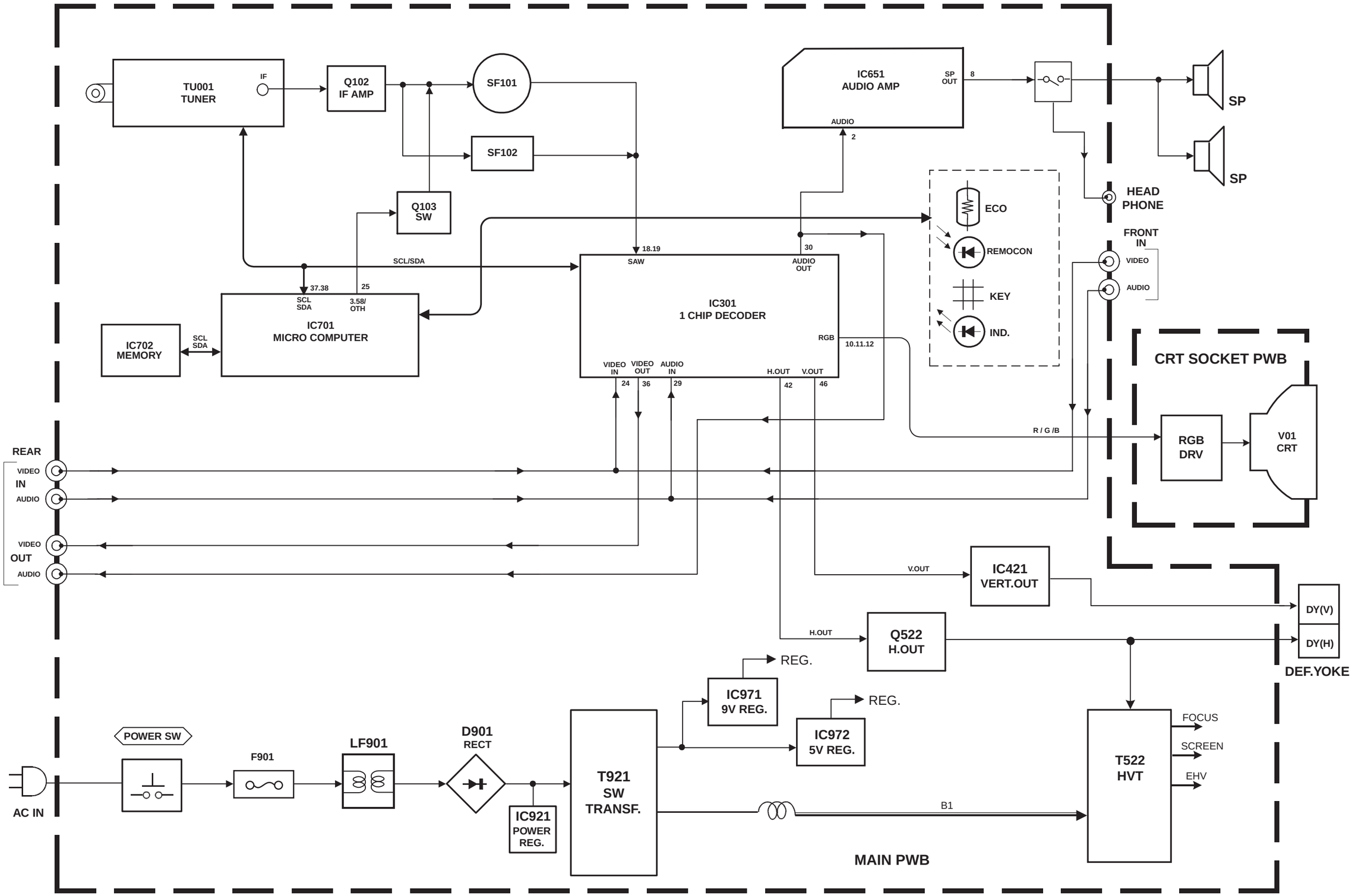
◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

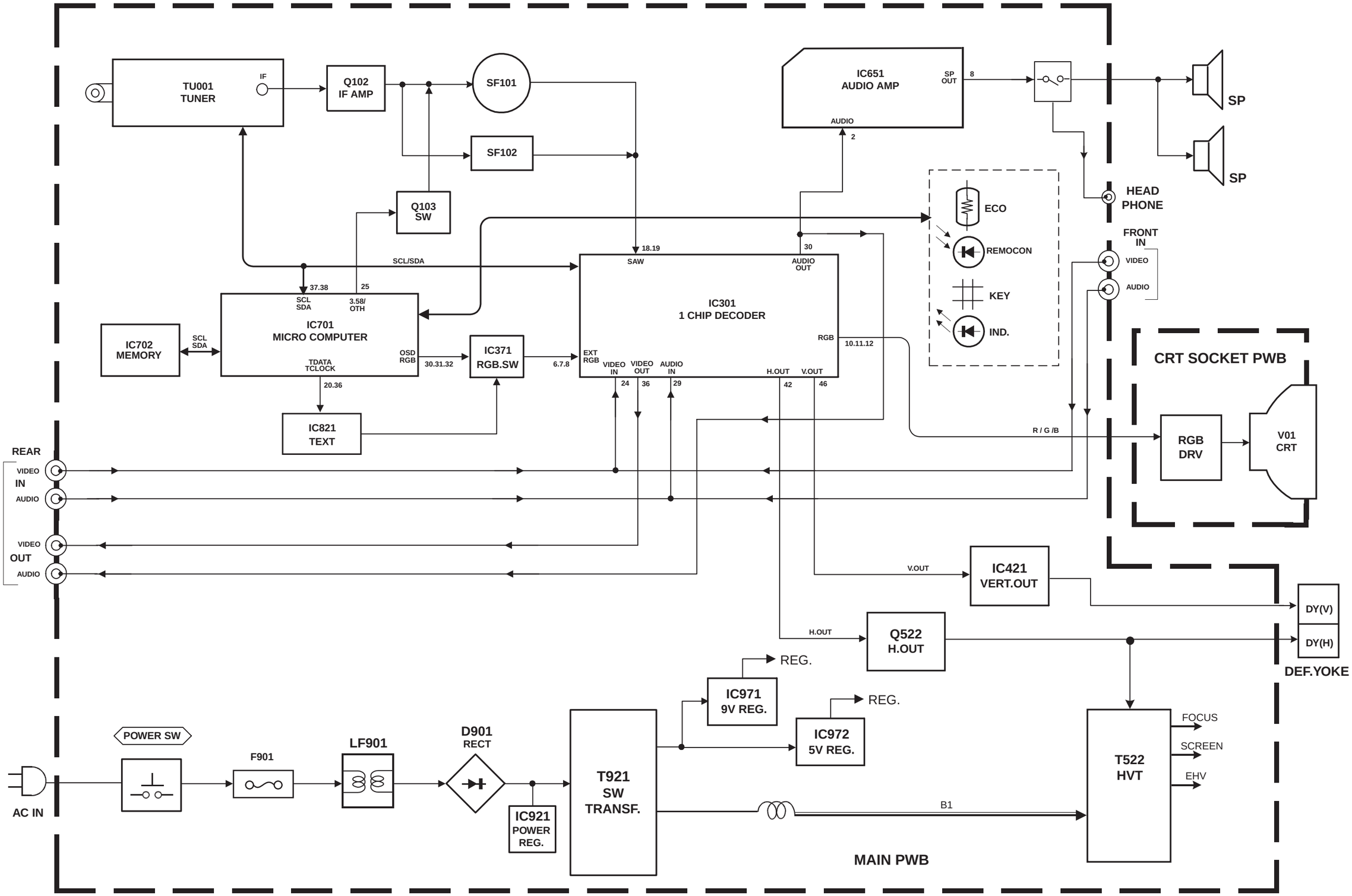
◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

AV-21F3
AV-21FMG3B

BLOCK DIAGRAM [AV-21F3, AV-21FMG3B]



BLOCK DIAGRAM **[AV-21FR3]**



CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAMS* (1/2) [AV-21F3, AV-21FMG3B]

MAIN PWB (1/2)

SCG-1411A-H2 (AV-21F3)
SCG-1432A-H2 (AV-21FMG3B)

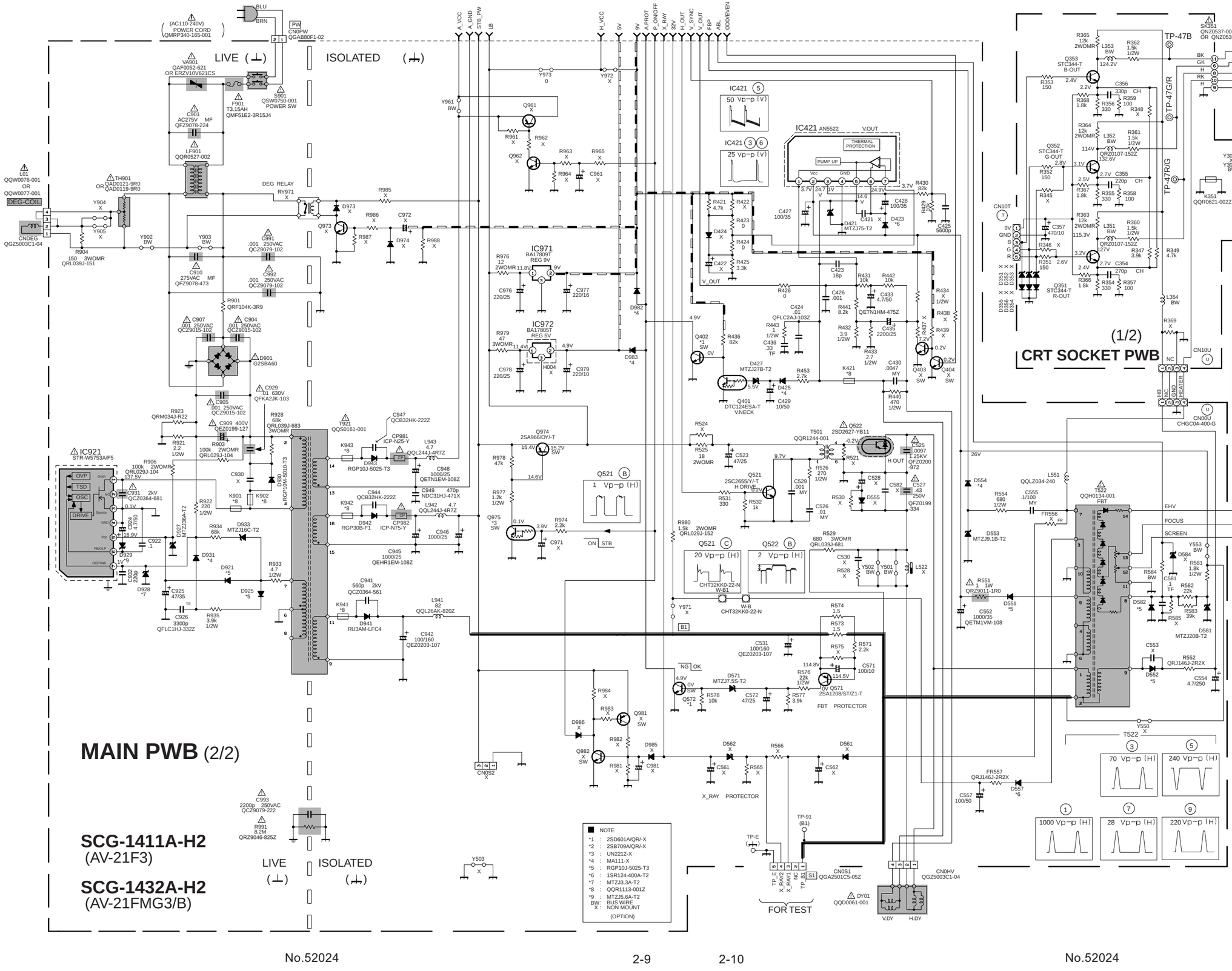
NOTE

*1:	2SD601A/QR/-X
*2:	2SB709A/QR/-X
*3:	UN2212-X
*4:	MA111-X
*5:	MTZJ9.1B-T2
*6:	MTZJ6.8C-T2
*7:	MTZJ12C-T2
*8:	UN2112-X
*9:	QQR0621-002Z
*10:	2SC5083/L-P/-T

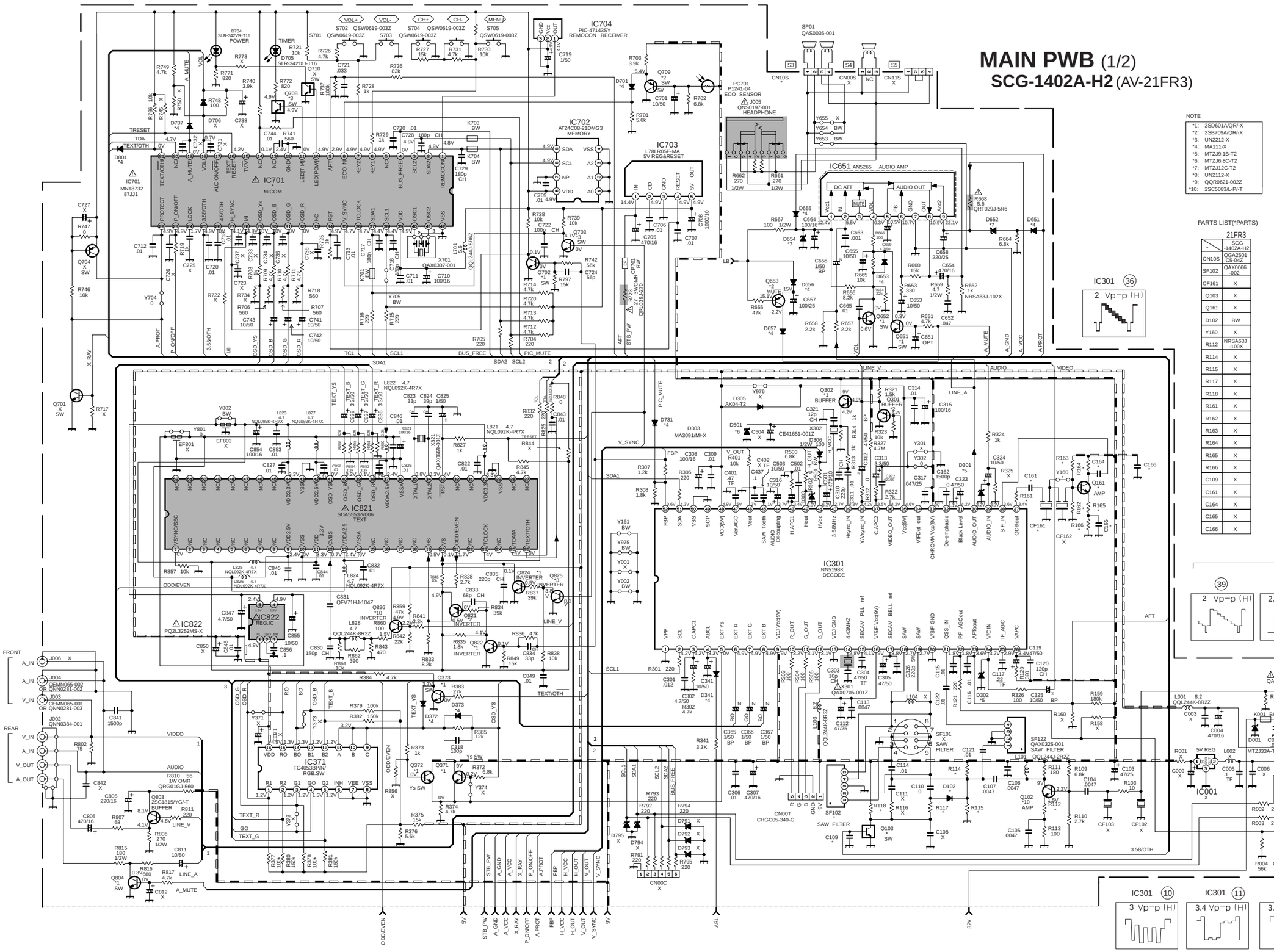
DIFFERENCE LIST(*PARTS)

-	21F3 SCG -1411A-H2	21FMG3B SCG -1432A-H2
SF102	QAX0666 -002	QAX0731 -001
CF161	X	QAX0642 -001Z
Q103	X	*3
Q161	X	*1
D102	BW	MA859 -T2
Y160	X	BW
R112	NRSA63J -100X	NRSA63J -220X
R114	X	NRSA63J -472X
R115	X	NRSA63J -222X
R117	X	NRSA63J -0R0X
R118	X	NRSA63J -222X
R161	X	NRSA63J -102X
R162	X	NRSA63J -122X
R163	X	NRSA63J -222X
R164	X	NRSA63J -221X
R165	X	NRSA63J -220X
R166	X	NRSA63J -821X
C109	X	NCB31HK -472X
C161	X	NCB31HK -103X
C164	X	NCB31HK -103X
C165	X	NCB31HK -103X
C166	X	NCB31HK -104X

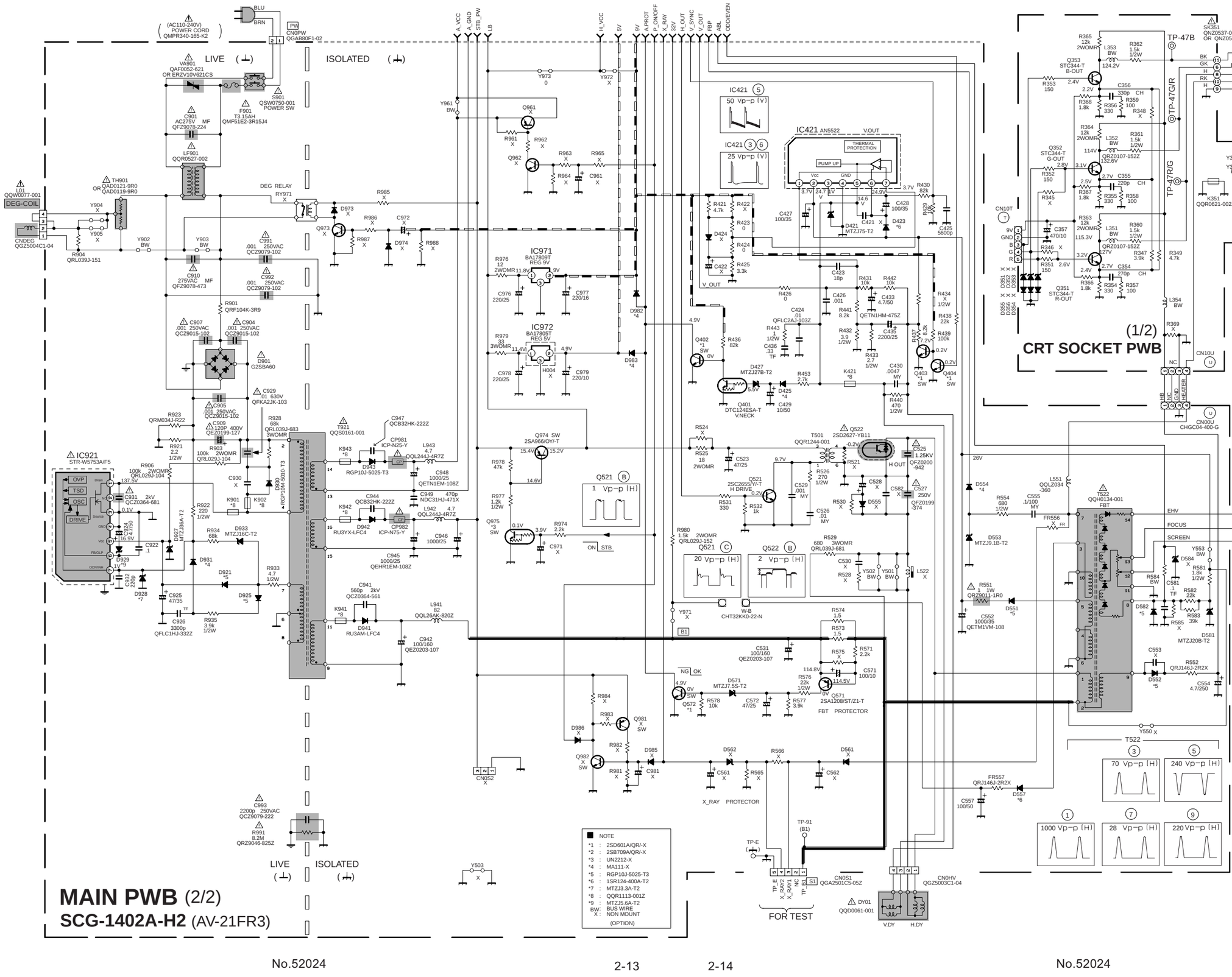
MAIN PWB CIRCUIT DIAGRAM (2/2) [AV-21F3, AV-21FMG3B]



MAIN PWB CIRCUIT DIAGRAMS (1/2) [AV-21FR3]



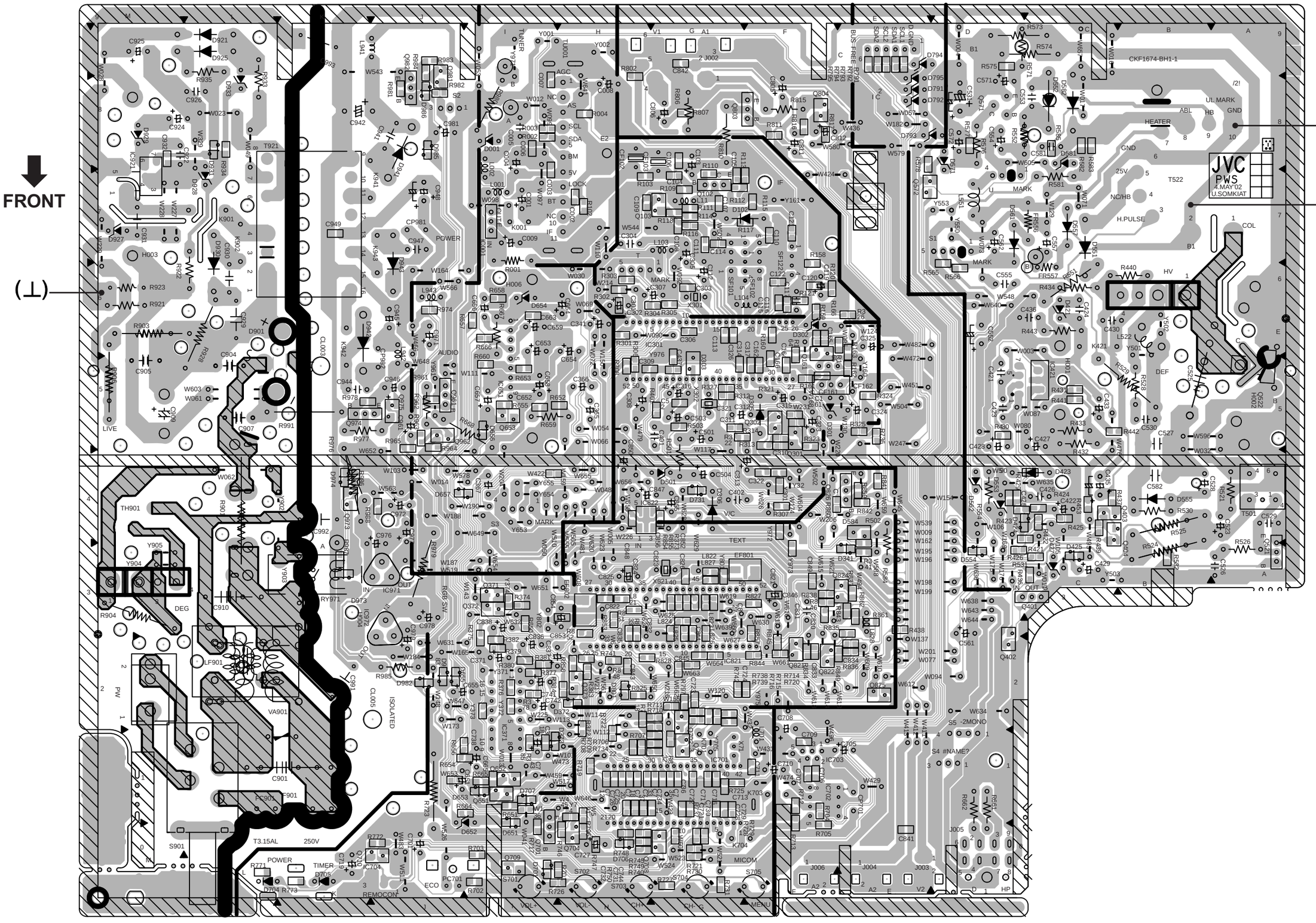
MAIN PWB CIRCUIT DIAGRAM (2/2) [AV-21FR3]



MAIN PWB (2/2)
SCG-1402A-H2 (AV-21FR3)

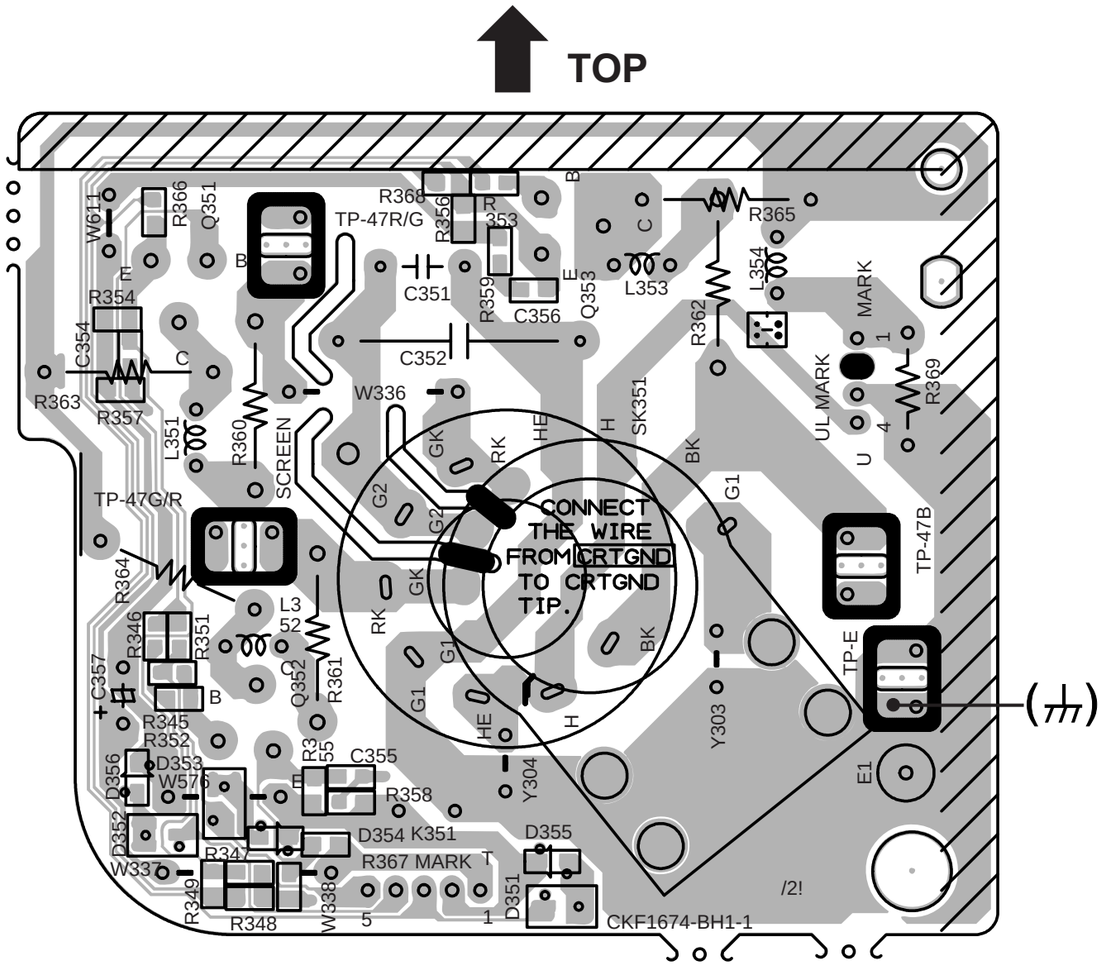
AV-21F3
AV-21FR3
AV-21FMG3B

PATTERN DIAGRAMS *MAIN PWB PATTERN*



AV-21F3
AV-21FR3
AV-21FMG3B

CRT SOCKET PWB PATTERN



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

AV-21F3
AV-21FR3
AV-21FMG3B

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[AV-21FMG3B]

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■ PACKING ····· 51

USING PW BOARD & REMOTE CONTROL UNIT

PWB ASS'Y / Model	MAIN PWB	REMOTE CONTROL UNIT
AV-21F3	SCG-1411A-H2	RM-C364GY-1H
AV-21FR3	SCG-1402A-H2	RM-C90-1H
AV-21FMG3B	SCG-1432A-H2	RM-C364-1H

REMOTE CONTROL UNIT PARTS LIST

[AV-21F3] (RM-C364GY-1H)

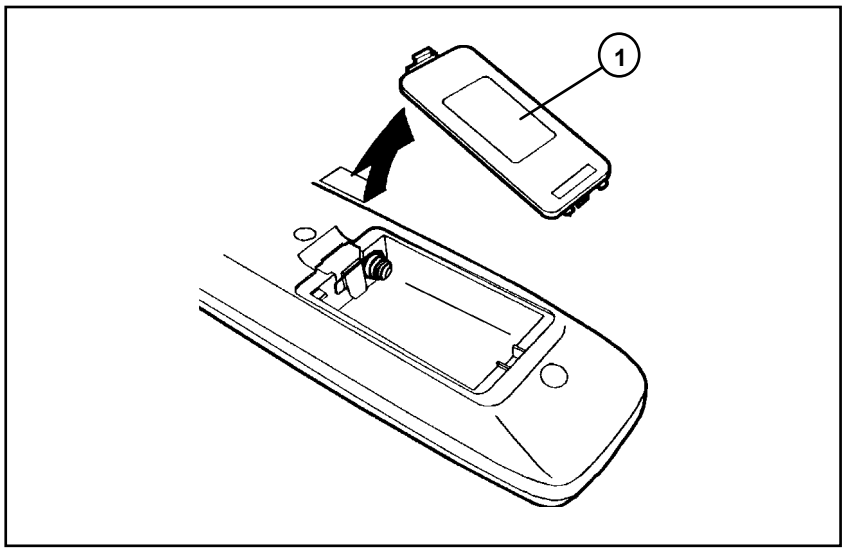
⚠ Ref.No.	Part No.	Part Name.	Description
1	25-1168F	BATTERY COVER	

[AV-21FR3] (RM-C90-1H)

⚠ Ref.No.	Part No.	Part Name.	Description
1	25-1168F	BATTERY COVER	

[AV-21FMG3B] (RM-C364-1H)

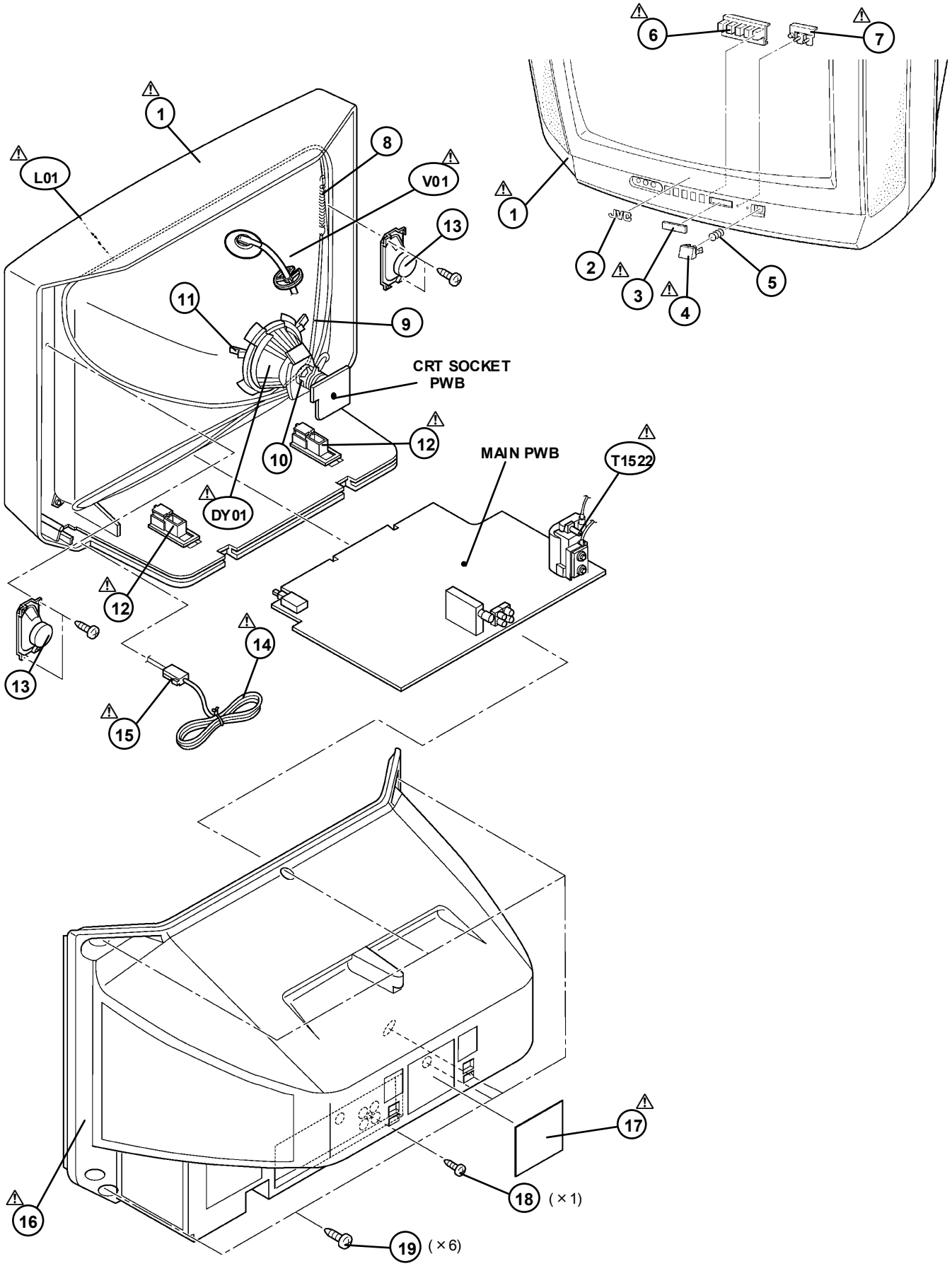
⚠ Ref.No.	Part No.	Part Name.	Description
1	25-1168F	BATTERY COVER	



EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
AV-21F3				
⚠	V01	A51KQK99X	PICTURE TUBE	
⚠	L01	QQW0077-001	DEG COIL	or QQW0076-001
⚠	DY01	QQD0061-001	DEF YOKE	
⚠	T1522	QQH0134-001	F B T	
⚠	1	LC10394-038A-H	FRONT CABINET	
	2	CM48006-007-C	JVC MARK	
⚠	3	LC30617-001C-H	E.E.WINDOW	
⚠	4	LC30616-004A-H	POWER KNOB	
	5	CM35235-006-H	SPRING	
⚠	6	LC20292-004A-H	CONTROL KNOB	
⚠	7	LC30618-001B-H	LED LENS	
	8	A48457-3-H	SPRING	
	9	CHGB0016-0B-FH	BRAIDED WIRE	
	10	A75034-B	P C MAGNET	or CE42378-00B
	11	CE42764-00A	WEDGE ASSY	(X3)
⚠	12	CM36623-B01-H	CHASSIS RAIL	(X2)
	13	QAS0036-001	SPEAKER	(X2)SP01
⚠	14	QMPR340-165-K2	POWER CORD	
⚠	15	CM47005-A01-H	CORD CLAMP	
⚠	16	LC10448-002B-H	REAR COVER	
⚠	17	LC20377-010B-H	RATING LABEL	
	18	QYSBSF3010Z	TAP SCREW	(X1)For REAR COVER
	19	QYSBSFG4016Z	TAP SCREW	(X6)For REAR COVER
AV-21FR3				
⚠	V01	A51KQK99X	PICTURE TUBE	
⚠	L01	QQW0077-001	DEG COIL	or QQW0076-001
⚠	DY01	QQD0061-001	DEF YOKE	
⚠	T1522	QQH0134-001	F B T	
⚠	1	LC10394-037A-H	FRONT CABINET	
	2	CM48006-007-C	JVC MARK	
⚠	3	LC30617-001C-H	E.E.WINDOW	
⚠	4	LC30616-004A-H	POWER KNOB	
	5	CM35235-006-H	SPRING	
⚠	6	LC20292-004A-H	CONTROL KNOB	
⚠	7	LC30618-001B-H	LED LENS	
	8	A48457-3-H	SPRING	
	9	CHGB0016-0B-FH	BRAIDED WIRE	
	10	A75034-B	P C MAGNET	or CE42378-00B
	11	CE42764-00A	WEDGE ASSY	(X3)
⚠	12	CM36623-B01-H	CHASSIS RAIL	(X2)
	13	QAS0036-001	SPEAKER	(X2)SP01
⚠	14	QMPR340-165-K2	POWER CORD	
⚠	15	CM47005-A01-H	CORD CLAMP	
⚠	16	LC10448-002B-H	REAR COVER	
⚠	17	LC20377-001B-H	RATING LABEL	
	18	QYSBSF3010Z	TAP SCREW	(X1)For REAR COVER
	19	QYSBSFG4016Z	TAP SCREW	(X6)For REAR COVER
AV-21FMG3B				
⚠	V01	A51KQK99X	PICTURE TUBE	
⚠	L01	QQW0077-001	DEG COIL	or QQW0076-001
⚠	DY01	QQD0061-001	DEF YOKE	
⚠	T1522	QQH0131-001	F B T	
⚠	1	LC10394-039A-H	FRONT CABINET	
	2	CM48006-007-C	JVC MARK	
⚠	3	LC30617-001C-H	E.E.WINDOW	
⚠	4	LC30616-004A-H	POWER KNOB	
	5	CM35235-006-H	SPRING	
⚠	6	LC20292-004A-H	CONTROL KNOB	
⚠	7	LC30618-001B-H	LED LENS	
	8	A48457-3-H	SPRING	
	9	CHGB0016-0B-FH	BRAIDED WIRE	
	10	A75034-B	P C MAGNET	or CE42378-00B
	11	CE42764-00A	WEDGE ASSY	(X3)
⚠	12	CM36623-B01-H	CHASSIS RAIL	(X2)
	13	QAS0036-001	SPEAKER	(X2)SP01
⚠	14	QMPR340-165-K2	POWER CORD	
⚠	15	CM47005-A01-H	CORD CLAMP	
⚠	16	LC10448-002B-H	REAR COVER	
⚠	17	LC20377-010B-H	RATING LABEL	
	18	QYSBSF3010Z	TAP SCREW	(X1)For REAR COVER
	19	QYSBSFG4016Z	TAP SCREW	(X6)For REAR COVER

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

[AV-21F3]

MAIN P.W. BOARD ASS'Y (SCG-1411A-H2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1002	NRSA63J-221X	MG R	220Ω 1/16W J
	R1003	NRSA63J-221X	MG R	220Ω 1/16W J
	R1004	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1102	NRSA63J-750X	MG R	75Ω 1/16W J
	R1103	NRSA63J-100X	MG R	10Ω 1/16W J
	R1109	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1110	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1111	NRSA63J-181X	MG R	180Ω 1/16W J
	R1112	NRSA63J-100X	MG R	10Ω 1/16W J
	R1113	NRSA63J-101X	MG R	100Ω 1/16W J
	R1120	NRSA63J-391X	MG R	390Ω 1/16W J
	R1121	NRSA63J-221X	MG R	220Ω 1/16W J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W J
	R1301	NRSA63J-221X	MG R	220Ω 1/16W J
	R1302	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1303	NRSA63J-101X	MG R	100Ω 1/16W J
	R1304	NRSA63J-101X	MG R	100Ω 1/16W J
	R1305	NRSA63J-101X	MG R	100Ω 1/16W J
	R1306	NRSA63J-221X	MG R	220Ω 1/16W J
	R1307	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R1308	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1312	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1313	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1314	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1321	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R1322	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1323	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1324	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1326	NRSA63J-101X	MG R	100Ω 1/16W J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W J
	R1341	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1347	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1349	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1351	NRSA63J-151X	MG R	150Ω 1/16W J
	R1352	NRSA63J-151X	MG R	150Ω 1/16W J
	R1353	NRSA63J-151X	MG R	150Ω 1/16W J
	R1354	NRSA63J-331X	MG R	330Ω 1/16W J
	R1355	NRSA63J-331X	MG R	330Ω 1/16W J
	R1356	NRSA63J-331X	MG R	330Ω 1/16W J
	R1357	NRSA63J-101X	MG R	100Ω 1/16W J
	R1358	NRSA63J-101X	MG R	100Ω 1/16W J
	R1359	NRSA63J-101X	MG R	100Ω 1/16W J
	R1360	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1361	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1362	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1363	QRL029J-123	OM R	12kΩ 2W J
	R1364	QRL029J-123	OM R	12kΩ 2W J
	R1365	QRL029J-123	OM R	12kΩ 2W J
	R1366	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1367	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1368	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1372	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1374	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1401	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1421	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1423	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1424	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1425	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1426	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1429	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1430	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1431	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1432	QRE121J-3R9Y	C R	3.9Ω 1/2W J
	R1433	QRE121J-2R7Y	C R	2.7Ω 1/2W J
	R1436	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1437	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1438	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1439	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1440	QRE121J-471Y	C R	470Ω 1/2W J
	R1441	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1442	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1453	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1502	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1503	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1525	QRL029J-180	OM R	18Ω 2W J
	R1526	QRE121J-271Y	C R	270Ω 1/2W J
	R1529	QRL039J-681	OM R	680Ω 3W J
	R1531	NRSA63J-331X	MG R	330Ω 1/16W J
	R1532	NRSA63J-102X	MG R	1kΩ 1/16W J
⚠	R1551	QRZ9011-1R0	F R	1.0Ω 1/2W J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	R1554	QRE121J-681Y	C R	680Ω 1/2W J
	R1571	QRE121J-222Y	C R	2.2kΩ 1/2W J
	R1573	QRT029J-1R5	MF R	1.5Ω 2W J
	R1574	QRT029J-1R5	MF R	1.5Ω 2W J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W J
	R1577	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1578	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W J
	R1582	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1583	NRSA63J-393X	MG R	39kΩ 1/16W J
	R1651	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1652	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1653	NRSA63J-331X	MG R	330Ω 1/16W J
	R1654	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1655	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1656	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1657	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1658	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1659	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1660	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1661	QRE121J-271Y	C R	270Ω 1/2W J
	R1662	QRE121J-271Y	C R	270Ω 1/2W J
	R1664	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1665	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1666	NRSA63J-101X	MG R	100Ω 1/16W J
	R1667	QRE121J-101Y	C R	100Ω 1/2W J
⚠	R1668	QRT029J-5R6	MF R	5.6Ω 2W J
	R1701	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1702	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1703	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1704	NRSA63J-221X	MG R	220Ω 1/16W J
	R1705	NRSA63J-221X	MG R	220Ω 1/16W J
	R1706	NRSA63J-561X	MG R	560Ω 1/16W J
	R1707	NRSA63J-561X	MG R	560Ω 1/16W J
	R1708	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1709	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1710	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1711	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1712	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1713	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1714	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1715	NRSA63J-221X	MG R	220Ω 1/16W J
	R1716	NRSA63J-221X	MG R	220Ω 1/16W J
	R1718	NRSA63J-561X	MG R	560Ω 1/16W J
	R1719	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1720	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1721	NRSA63J-103X	MG R	10kΩ 1/16W J
⚠	R1723	QRL039J-270	OM R	27Ω 3W J
	R1725	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1726	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1727	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1728	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1729	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1730	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1731	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1736	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1737	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1738	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1739	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1740	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1741	NRSA63J-561X	MG R	560Ω 1/16W J
	R1742	NRSA63J-563X	MG R	56kΩ 1/16W J

[AV-21F3]

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	
	R1746	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R1747	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
	R1748	NRSA63J-101X	MG R	100Ω 1/16W	J
	R1749	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R1771	NRSA63J-821X	MG R	820Ω 1/16W	J
	R1772	NRSA63J-821X	MG R	820Ω 1/16W	J
	R1791	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1792	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1793	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1794	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1795	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1796	NRSA63J-103X	MG R	10kΩ 1/16W	J
	R1797	NRSA63J-153X	MG R	15kΩ 1/16W	J
	R1802	NRSA63J-750X	MG R	75Ω 1/16W	J
	R1806	QRE121J-271Y	C R	270Ω 1/2W	J
	R1807	NRSA63J-680X	MG R	68Ω 1/16W	J
	R1810	QRG01GJ-560	OM R	56Ω 1W	J
	R1811	NRSA63J-221X	MG R	220Ω 1/16W	J
	R1815	QRE121J-181Y	C R	180Ω 1/2W	J
	R1816	NRSA63J-681X	MG R	680Ω 1/16W	J
	R1817	NRSA63J-472X	MG R	4.7kΩ 1/16W	J
	R1901	QRF104K-3R9	UNF R	3.9Ω 10W	K
	R1903	QRL029J-104	OM R	100kΩ 2W	J
	R1904	QRL039J-151	OM R	150Ω 3W	J
	R1906	QRL029J-104	OM R	100kΩ 2W	J
	R1921	QRE121J-2R2Y	C R	2.2Ω 1/2W	J
	R1922	QRE121J-221Y	C R	220Ω 1/2W	J
	R1923	QRM034J-R22	M P R	0.22kΩ 3W	J
	R1928	QRL039J-683	OM R	68kΩ 3W	J
	R1933	QRE121J-4R7Y	C R	4.7Ω 1/2W	J
	R1934	NRSA63J-683X	MG R	68kΩ 1/16W	J
	R1935	QRE121J-562Y	C R	5.6kΩ 1/2W	J
	R1974	NRSA63J-222X	MG R	2.2kΩ 1/16W	J
	R1976	QRT029J-8R2	MF R	8.2Ω 2W	J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W	J
	R1978	NRSA63J-473X	MG R	47kΩ 1/16W	J
	R1979	QRL039J-220	OM R	22Ω 3W	J
	R1980	QRL029J-152	OM R	1.5kΩ 2W	J
⚠	R1991	QRZ9046-825Z	C R	8.2MΩ 1/2W	K

CAPACITOR

	Symbol No.	Part No.	Part Name	Description		
	C1001	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1002	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1004	QETN1CM-477Z	E CAP.	470μF	16V	M
	C1005	QFV71HJ-104Z	MF CAP.	0.1μF	50V	J
	C1008	QETN1HM-475Z	E CAP.	4.7μF	50V	M
	C1103	QETN1EM-476Z	E CAP.	47μF	25V	M
	C1104	NCB31HK-472X	C CAP.	4700pF	50V	K
	C1105	NCB31HK-472X	C CAP.	4700pF	50V	K
	C1106	NCB31HK-472X	C CAP.	4700pF	50V	K
	C1107	NCB31HK-472X	C CAP.	4700pF	50V	K
	C1110	NRSA63J-0R0X	MG R	0.0Ω	1/16W	J
	C1112	QETN1EM-476Z	E CAP.	47μF	25V	M
	C1113	NCB31HK-472X	C CAP.	4700pF	50V	K
	C1114	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1115	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1116	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1117	QFV71HJ-224Z	MF CAP.	0.22μF	50V	J
	C1119	QETN1HM-474Z	E CAP.	0.47μF	50V	M
	C1120	NDC31HJ-121X	C CAP.	120pF	50V	J
	C1121	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1122	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1162	NCB31HK-152X	C CAP.	1500pF	50V	K
	C1301	NCB31HK-123X	C CAP.	0.012μF	50V	K
	C1302	QETN1HM-475Z	E CAP.	4.7μF	50V	M
	C1303	NDC31HJ-100X	C CAP.	10pF	50V	J
	C1304	QFV71HJ-474Z	MF CAP.	0.47μF	50V	J
	C1305	QETN1HM-474Z	E CAP.	0.47μF	50V	M
	C1306	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1307	QETN1CM-477Z	E CAP.	470μF	16V	M
	C1308	QETN1CM-107Z	E CAP.	100μF	16V	M
	C1309	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1310	NDC31HJ-221X	C CAP.	220pF	50V	J
	C1311	NCB31HK-103X	C CAP.	0.01μF	50V	K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description		
	C1312	QENC1HM-474Z	BP E CAP	0.47μF	50V	M
	C1313	QETN1HM-335Z	E CAP	3.3μF	50V	M
	C1314	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1315	QETN1CM-107Z	E CAP.	100μF	16V	M
	C1316	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1317	NCB31EK-473X	C CAP.	0.047μF	25V	K
	C1321	NDC31HJ-120X	C CAP.	12pF	50V	J
	C1322	NCB31EK-273X	C CAP.	0.027μF	25V	K
	C1323	QETN1HM-474Z	E CAP.	0.47μF	50V	M
	C1324	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1325	QENC1HM-106Z	BP E CAP.	10μF	50V	M
	C1326	NCS21HJ-221X	C CAP.	220pF	50V	J
	C1341	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1352	QFZ0097-103	MM CAP.	0.01μF	1250V	K
	C1354	NDC31HJ-271X	C CAP.	270pF	50V	J
	C1355	NDC31HJ-221X	C CAP.	220pF	50V	J
	C1356	NDC31HJ-331X	C CAP.	330pF	50V	J
	C1357	QETN1AM-477Z	E CAP.	470μF	10V	M
	C1365	QENC1HM-105Z	E CAP.	1μF	50V	M
	C1366	QENC1HM-105Z	E CAP.	1μF	50V	M
	C1367	QENC1HM-105Z	E CAP.	1μF	50V	M
	C1401	QFV71HJ-474Z	MF CAP.	0.47μF	50V	J
	C1423	QCS32HJ-180Z	C CAP.	18pF	500V	J
	C1424	QFLC2AJ-103Z	M CAP.	0.01μF	100V	J
	C1426	QFLC1HJ-102Z	M CAP.	1000pF	50V	J
	C1427	QETN1VM-107Z	E CAP.	100μF	35V	M
	C1428	QETN1VM-107Z	E CAP.	100μF	35V	M
	C1429	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1430	QFN32AJ-472Z	M CAP.	4700pF	100V	J
	C1433	QETN1HM-475Z	E CAP.	4.7μF	50V	M
	C1435	QETM1EM-228	E CAP.	2200μF	25V	M
	C1436	QFV71HJ-334Z	MF CAP.	0.33μF	50V	J
	C1437	NCB31HK-104X	C CAP.	0.1μF	50V	K
	C1501	QETN1AM-477Z	E CAP.	470μF	10V	M
	C1502	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1503	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1523	QETN1EM-476Z	E CAP.	47μF	25V	M
⚠	C1525	QFZ0200-972	MPP CAP.	9700pF	1.5kVH	±3%
	C1526	QFLC1HJ-103Z	M CAP.	0.01μF	50V	J
⚠	C1527	QFZ0199-334	M P P CAP.	0.33μF	250V	J
	C1529	QFN32AJ-102Z	M CAP.	1000pF	100V	J
	C1531	QEZ0203-107	E CAP.	100μF	160V	M
	C1552	QETM1VM-108	E CAP.	1000μF	35V	M
	C1554	QETN2EM-475Z	E.CAP.	4.7μF	250V	M
	C1555	QFLC2AJ-104Z	M CAP.	0.1μF	100V	J
	C1557	QETN1HM-107Z	E CAP.	100μF	50V	M
	C1571	QETN1AM-107Z	E CAP.	100μF	10V	M
	C1572	QETN1EM-476Z	E CAP.	47μF	25V	M
	C1581	QFV71HJ-104Z	MF CAP.	0.1μF	50V	J
	C1652	NCB31HK-473X	C CAP.	0.047μF	50V	K
	C1653	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1654	QETN1CM-477Z	E CAP.	470μF	16V	M
	C1655	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1656	QENC1HM-105Z	E CAP.	1μF	50V	M
	C1657	QETN1EM-107Z	E CAP.	100μF	25V	M
	C1658	QETN1EM-227Z	E CAP.	220μF	25V	M
	C1659	QETN1HM-475Z	E CAP.	4.7μF	50V	M
	C1663	NCB31HK-102X	C CAP.	1000pF	50V	K
	C1664	QETN1CM-107Z	E CAP.	100μF	16V	M
	C1665	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1701	QETN1HM-106Z	E CAP.	10μF	50V	M
	C1705	QETN1CM-477Z	E CAP.	470μF	16V	M
	C1706	NCB31HK-104X	C CAP.	0.1μF	50V	K
	C1707	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1708	QETN1AM-108Z	E CAP.	1000μF	10V	M
	C1709	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1710	QETN1CM-107Z	E CAP.	100μF	16V	M
	C1711	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1712	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1713	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1716	NDC31HJ-181X	C CAP.	180pF	50V	J
	C1717	NDC31HJ-181X	C CAP.	180pF	50V	J
	C1718	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1719	QETN1HM-105Z	E CAP.	1μF	50V	M
	C1720	NCB31HK-103X	C CAP.	0.01μF	50V	K
	C1721	NCB31EK-333X	C CAP.	0.033μF	25V	K

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CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1722	NDC31HJ-101X	C CAP.	100pF 50V J
	C1724	NDC31HJ-560X	C CAP.	56pF 50V J
	C1728	NDC31HJ-181X	C CAP.	180pF 50V J
	C1729	NDC31HJ-181X	C CAP.	180pF 50V J
	C1730	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1741	QETN1HM-106Z	E CAP.	10μF 50V M
	C1742	QETN1HM-106Z	E CAP.	10μF 50V M
	C1743	QETN1HM-106Z	E CAP.	10μF 50V M
	C1744	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1805	QETN1CM-227Z	E CAP.	220μF 16V M
	C1806	QETN1CM-477Z	E CAP.	470μF 16V M
	C1811	QETN1HM-106Z	E CAP.	10μF 50V M
	C1841	NCB31HK-152X	C CAP.	1500pF 50V K
⚠	C1901	QFZ9078-224	M P F CAP	0.22μF AC275V M
⚠	C1904	QCZ9015-102	C CAP.	1000pF AC250V Z
⚠	C1905	QCZ9015-102	C CAP.	1000pF AC250V Z
⚠	C1907	QCZ9015-102	C CAP.	1000pF AC250V Z
⚠	C1909	QEZ0552-127	E CAP. or QEZ0199-127	120μF 400V M
⚠	C1910	QFZ9078-473	M P F CAP	0.047μF AC275V M
	C1922	QFLC1HJ-104Z	M CAP.	0.1μF 50V J
	C1924	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1925	QETN1VM-476Z	E CAP	47μF 35V M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V J
⚠	C1929	QFKA2JK-103	M M CAP	0.01μF 630V K
⚠	C1931	QCZ0364-681	C CAP	680pF 2KV K
	C1932	NDC31HJ-681X	C CAP.	680pF 50V J
	C1941	QCZ0364-561	C CAP	560pF 2KV K
	C1942	QEZ0203-107	E CAP.	100μF 160V M
	C1944	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1945	QEHR1EM-108Z	E CAP.	1000μF 25V M
	C1946	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1947	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1948	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1949	NDC31HJ-471X	C CAP.	470pF 50V J
	C1961	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1976	QETN1EM-227Z	E CAP.	220μF 25V M
	C1977	QETN1CM-227Z	E CAP.	220μF 16V M
	C1978	QETN1EM-227Z	E CAP.	220μF 25V M
	C1979	QETN1AM-227Z	E CAP.	220μF 10V M
⚠	C1991	QCZ9079-102	C CAP.	1000pF AC250V M
⚠	C1992	QCZ9079-102	C CAP.	1000pF AC250V M
⚠	C1993	QCZ9079-222	C CAP.	2200pF AC250V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description
	T1501	QQR1244-001	DRIVE TRANSF.	
⚠	T1522	QQH0134-001	F B T	
⚠	T1921	QQS0161-001	SW TRANSF.	

COIL

⚠	Symbol No.	Part No.	Part Name	Description
	L1001	QQL244K-8R2Z	COIL	8.2μH K
	L1101	QQL244J-2R2Z	COIL	2.2μH J
	L1103	QQL244K-8R2Z	COIL	8.2μH K
	L1551	QQLZ034-240	HEATER CHOKE	
	L1701	QQL244J-5R6Z	COIL	5.6μH J
	L1941	QQL26AK-820Z	COIL	82μH K
	L1942	QQL244J-4R7Z	PEAKING COIL	
	L1943	QQL244J-4R7Z	PEAKING COIL	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1301	MTZJ9.1B-T2	ZENER DIODE	
	D1302	MTZJ9.1B-T2	ZENER DIODE	
	D1305	AK04-T2	DIODE	
	D1306	QRE121J-121Y	C R	120Ω 1/2W J
	D1341	MA111-X	CHIP DIODE	
	D1421	MTZJ75-T2	ZENER DIODE	
	D1423	1SR124-400A-T2	SI DIODE	
	D1425	MA111-X	CHIP DIODE	
	D1427	MTZJ27B-T2	ZENER DIODE	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1501	MTZJ6.8C-T2	ZENER DIODE	
	D1551	RGP10J-5025-T3	SI DIODE	
	D1552	RGP10J-5025-T3	SI DIODE	
	D1553	MTZJ9.1B-T2	ZENER DIODE	
	D1554	MA111-X	CHIP DIODE	
	D1557	1SR124-400A-T2	SI DIODE	
	D1571	MTZJ7.5S-T2	ZENER DIODE	
	D1581	MTZJ20B-T2	ZENER DIODE	
	D1582	RGP10J-5025-T3	SI DIODE	
	D1651	MA111-X	CHIP DIODE	
	D1652	MTZJ12C-T2	ZENER DIODE	
	D1653	MA111-X	CHIP DIODE	
	D1654	MTZJ12C-T2	ZENER DIODE	
	D1655	MA111-X	CHIP DIODE	
	D1656	MA111-X	CHIP DIODE	
	D1657	MA111-X	CHIP DIODE	
	D1701	MA111-X	CHIP DIODE	
	D1704	SLR-342VR-T16	L E D(RED	
	D1705	SLR-342DU-T16	L E D (OR	
	D1707	MA111-X	CHIP DIODE	
	D1731	MA111-X	CHIP DIODE	
⚠	D1901	G2SBA60	BRIDGE DIODE	
	D1921	RGP10J-5025-T3	SI DIODE	
	D1925	RGP10J-5025-T3	SI DIODE	
	D1927	MTZJ36A-T2	ZENER DIODE	
	D1928	MTZJ3.3A-T2	ZENER DIODE	
	D1929	MTZJ3.3A-T2	ZENER DIODE	
	D1930	RGP10M-5010-T3	SI DIODE	
	D1931	MA111-X	CHIP DIODE	
	D1933	MTZJ16C-T2	ZENER DIODE	
	D1941	RU3AM-LFC4	SI DIODE	
	D1942	RU3YX-LFC4	SI DIODE	
	D1943	RGP10J-5025-T3	SI DIODE	
	D1982	MA111-X	CHIP DIODE	
	D1983	MA111-X	CHIP DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1301	2SB709A/QR/-X	CHIP TRANSISTOR	
	Q1302	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1351	STC344-T	SI.TRANSISTOR	
	Q1352	STC344-T	SI.TRANSISTOR	
	Q1353	STC344-T	SI.TRANSISTOR	
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR	
	Q1402	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1403	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1404	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1521	2SC2655/Y/-T	SI.TRANSISTOR	
⚠	Q1522	2SD2627-YB11	POWER TRANSISTOR	H.OUT
	Q1571	2SA1208/ST/Z1-T	SI.TRANSISTOR	
	Q1572	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1651	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1652	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1653	2SB709A/QR/-X	CHIP TRANSISTOR	
	Q1702	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1703	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1708	UN2212-X	DIGI.TRANSISTOR	
	Q1709	2SB709A/QR/-X	CHIP TRANSISTOR	
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR	
	Q1804	2SD601A/QR/-X	CHIP TRANSISTOR	
	Q1974	2SA966/OY/-T	SI.TRANSISTOR	
	Q1975	UN2212-X	DIGI.TRANSISTOR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC1301	NN5198K	I.C.	
	IC1421	AN5522	I.C.	
	IC1651	AN5265	I.C.	
⚠	IC1701	MN1873287JJ1	I C	
	IC1702	AT24C08-21DMG3	I.C.	(SERVICE)
	IC1703	L78LR05E-MA	I.C.	
	IC1704	PIC-47143SY	IR DETECT	
⚠	IC1921	STR-W5753A/F5	I.C.	
	IC1971	BA17809T	I.C.	
	IC1972	BA17805T	I.C.	

[AV-21F3]

⚠	Symbol No.	Part No.	Part Name	Description
	OTHERS			
		LC30114-001C-H	LED LED HOLDERR	
⚠	CP1981	ICP-N25-Y	I.C. PROTECT	
⚠	CP1982	ICP-N75-Y	I.C. PROTECT	
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A
	FC1901	CEMG002-001Z	FUSE CLIP	(X2)
	FR1557	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	J1002	QNNG384-001	PIN JACK	
	J1003	QNNQ281-003	PIN JACK	or CEMN065-001
	J1004	QNNQ281-002	PIN JACK	or CEMN065-002
⚠	J1005	QNSQ197-001	3.5 JACK	
	K1351	QQR0621-002Z	BEADS CORE	
	K1421	QQR1113-001Z	FERRITE BEADS	
	K1941	QQR1113-001Z	FERRITE BEADS	
	K1942	QQR1113-001Z	FERRITE BEADS	
	K1943	QQR1113-001Z	FERRITE BEADS	
⚠	LF1901	QQR0527-002	LINE FILTER	
	PC1701	P1241-04	C D S	
	S1701	QSW0619-003Z	PUSH SWITCH	VOL+
	S1702	QSW0619-003Z	PUSH SWITCH	VOL-
	S1703	QSW0619-003Z	PUSH SWITCH	CH+
	S1704	QSW0619-003Z	PUSH SWITCH	CH-
	S1705	QSW0619-003Z	PUSH SWITCH	MENU
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW
	SF1102	QAX0666-002	SAW FILTER	
	SF1122	QAX0325-001	SAW FILTER	
⚠	SK1351	QNZ0537-001	CRT SOCKE	or QNZ0536-001
⚠	TH1901	QAD0121-9R0	W POSISTOR	or QAD0119-9R0
⚠	TU1001	QAU0282-001	TUNER	
⚠	VA1901	ERZV10V621CS	VARISTOR	or QAF0052-621
⚠	X1301	QAX0705-001Z	CRYSTAL	
	X1302	CE41651-001Z	X-TAL	
	X1701	QAX0307-001	CERAMIC R	

PRINTED WIRING BOARD PARTS LIST

[AV-21FR3]

MAIN P.W. BOARD ASS'Y (SCG-1402A-H2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1002	NRSA63J-221X	MG R	220Ω 1/16W J
	R1003	NRSA63J-221X	MG R	220Ω 1/16W J
	R1004	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1102	NRSA63J-750X	MG R	75Ω 1/16W J
	R1103	NRSA63J-100X	MG R	10Ω 1/16W J
	R1109	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1110	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1111	NRSA63J-181X	MG R	180Ω 1/16W J
	R1112	NRSA63J-100X	MG R	10Ω 1/16W J
	R1113	NRSA63J-101X	MG R	100Ω 1/16W J
	R1120	NRSA63J-391X	MG R	390Ω 1/16W J
	R1121	NRSA63J-221X	MG R	220Ω 1/16W J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W J
	R1301	NRSA63J-221X	MG R	220Ω 1/16W J
	R1302	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1303	NRSA63J-101X	MG R	100Ω 1/16W J
	R1304	NRSA63J-101X	MG R	100Ω 1/16W J
	R1305	NRSA63J-101X	MG R	100Ω 1/16W J
	R1306	NRSA63J-221X	MG R	220Ω 1/16W J
	R1307	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R1308	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1312	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1313	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1314	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1321	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R1322	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1323	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1324	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1326	NRSA63J-101X	MG R	100Ω 1/16W J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W J
	R1341	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1347	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1349	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1351	NRSA63J-151X	MG R	150Ω 1/16W J
	R1352	NRSA63J-151X	MG R	150Ω 1/16W J
	R1353	NRSA63J-151X	MG R	150Ω 1/16W J
	R1354	NRSA63J-331X	MG R	330Ω 1/16W J
	R1355	NRSA63J-331X	MG R	330Ω 1/16W J
	R1356	NRSA63J-331X	MG R	330Ω 1/16W J
	R1357	NRSA63J-101X	MG R	100Ω 1/16W J
	R1358	NRSA63J-101X	MG R	100Ω 1/16W J
	R1359	NRSA63J-101X	MG R	100Ω 1/16W J
	R1360	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1361	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1362	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1363	QRL029J-123	OM R	12kΩ 2W J
	R1364	QRL029J-123	OM R	12kΩ 2W J
	R1365	QRL029J-123	OM R	12kΩ 2W J
	R1366	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1367	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1368	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1372	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1373	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1374	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1375	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1376	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1377	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1378	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1379	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1380	NRSA63J-154X	MG R	150kΩ 1/16W J
	R1381	NRSA63J-154X	MG R	150kΩ 1/16W J
	R1382	NRSA63J-154X	MG R	150kΩ 1/16W J
	R1383	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1384	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1385	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1401	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1421	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1423	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1424	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1425	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1426	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1429	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1430	NRSA63J-823X	MG R	82kΩ 1/16W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1431	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1432	QRE121J-3R9Y	C R	3.9Ω 1/2W J
	R1433	QRE121J-2R7Y	C R	2.7Ω 1/2W J
	R1436	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1437	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1438	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1439	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1440	QRE121J-471Y	C R	470Ω 1/2W J
	R1441	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1442	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W J
	R1453	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1502	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1503	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1525	QRL029J-180	OM R	18Ω 2W J
	R1526	QRE121J-271Y	C R	270Ω 1/2W J
	R1529	QRL039J-681	OM R	680Ω 3W J
	R1531	NRSA63J-331X	MG R	330Ω 1/16W J
	R1532	NRSA63J-102X	MG R	1kΩ 1/16W J
⚠	R1551	QRZ9011-1R0	F R	1.0Ω 1/2W J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	R1554	QRE121J-681Y	C R	680Ω 1/2W J
	R1571	QRE121J-222Y	C R	2.2kΩ 1/2W J
	R1573	QRT029J-1R5	MF R	1.5Ω 2W J
	R1574	QRT029J-1R5	MF R	1.5Ω 2W J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W J
	R1577	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1578	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W J
	R1582	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1583	NRSA63J-393X	MG R	39kΩ 1/16W J
	R1651	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1652	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1653	NRSA63J-331X	MG R	330Ω 1/16W J
	R1654	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1655	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1656	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1657	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1658	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1659	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1660	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1661	QRE121J-271Y	C R	270Ω 1/2W J
	R1662	QRE121J-271Y	C R	270Ω 1/2W J
	R1664	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1665	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1666	NRSA63J-101X	MG R	100Ω 1/16W J
	R1667	QRE121J-101Y	C R	100Ω 1/2W J
⚠	R1668	QRT029J-5R6	MF R	5.6Ω 2W J
	R1701	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1702	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1703	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1704	NRSA63J-221X	MG R	220Ω 1/16W J
	R1705	NRSA63J-221X	MG R	220Ω 1/16W J
	R1706	NRSA63J-561X	MG R	560Ω 1/16W J
	R1707	NRSA63J-561X	MG R	560Ω 1/16W J
	R1708	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1709	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1710	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1711	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1712	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1713	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1714	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1715	NRSA63J-221X	MG R	220Ω 1/16W J
	R1716	NRSA63J-221X	MG R	220Ω 1/16W J
	R1718	NRSA63J-561X	MG R	560Ω 1/16W J
	R1719	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1720	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1721	NRSA63J-103X	MG R	10kΩ 1/16W J
⚠	R1723	QRL039J-270	OM R	27Ω 3W J
	R1725	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1726	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1727	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1728	NRSA63J-102X	MG R	1kΩ 1/16W J

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RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R1729	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1730	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1731	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1736	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1737	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1738	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1739	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1740	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1741	NRSA63J-561X	MG R	560Ω 1/16W J
	R1742	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1746	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1747	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1748	NRSA63J-101X	MG R	100Ω 1/16W J
	R1749	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1771	NRSA63J-821X	MG R	820Ω 1/16W J
	R1772	NRSA63J-821X	MG R	820Ω 1/16W J
	R1791	NRSA63J-221X	MG R	220Ω 1/16W J
	R1792	NRSA63J-221X	MG R	220Ω 1/16W J
	R1793	NRSA63J-221X	MG R	220Ω 1/16W J
	R1794	NRSA63J-221X	MG R	220Ω 1/16W J
	R1795	NRSA63J-221X	MG R	220Ω 1/16W J
	R1796	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1797	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1802	NRSA63J-750X	MG R	75Ω 1/16W J
	R1806	QRE121J-271Y	C R	270Ω 1/2W J
	R1807	NRSA63J-680X	MG R	68Ω 1/16W J
	R1810	QRG01GJ-560	OM R	56Ω 1W J
	R1811	NRSA63J-221X	MG R	220Ω 1/16W J
	R1815	QRE121J-181Y	C R	180Ω 1/2W J
	R1816	NRSA63J-681X	MG R	680Ω 1/16W J
	R1817	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1825	NRSA63J-221X	MG R	220Ω 1/16W J
	R1827	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1828	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1832	NRSA63J-221X	MG R	220Ω 1/16W J
	R1833	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1834	NRSA63J-393X	MG R	39kΩ 1/16W J
	R1835	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1836	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1837	NRSA63J-393X	MG R	39kΩ 1/16W J
	R1838	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1841	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1842	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1843	NRSA63J-471X	MG R	470Ω 1/16W J
	R1845	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1846	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1848	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1849	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1850	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1851	NRSA63J-821X	MG R	820Ω 1/16W J
	R1852	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1853	NRSA63J-821X	MG R	820Ω 1/16W J
	R1854	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1855	NRSA63J-821X	MG R	820Ω 1/16W J
	R1857	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1859	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1860	NRSA63J-101X	MG R	100Ω 1/16W J
	R1861	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1862	NRSA63J-391X	MG R	390Ω 1/16W J
	R1901	QRF104K-3R9	UNF R	3.9Ω 10W K
	R1903	QRL029J-104	OM R	100kΩ 2W J
	R1904	QRL039J-151	OM R	150Ω 3W J
	R1906	QRL029J-104	OM R	100kΩ 2W J
	R1921	QRE121J-2R2Y	C R	2.2Ω 1/2W J
	R1922	QRE121J-221Y	C R	220Ω 1/2W J
	R1923	QRM034J-R22	MP R	0.22Ω 3W J
	R1928	QRL039J-683	OM R	68kΩ 3W J
	R1933	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1934	NRSA63J-683X	MG R	68kΩ 1/16W J
	R1935	QRE121J-562Y	C R	5.6kΩ 1/2W J
	R1974	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1976	QRT029J-8R2	MF R	8.2Ω 2W J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W J
	R1978	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1979	QRL039J-220	OM R	22Ω 3W J
	R1980	QRL029J-152	OM R	1.5kΩ 2W J
⚠	R1991	QRZ9046-825Z	C R	8.2MΩ 1/2W K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1001	QETN1HM-106Z	E CAP.	10μF 50V M
	C1002	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1004	QETN1CM-477Z	E CAP.	470μF 16V M
	C1005	QFV71HJ-104Z	MF CAP.	0.1μF 50V J
	C1008	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1103	QETN1EM-476Z	E CAP.	47μF 25V M
	C1104	NCB31HK-472X	C CAP.	4700pF 50V K
	C1105	NCB31HK-472X	C CAP.	4700pF 50V K
	C1106	NCB31HK-472X	C CAP.	4700pF 50V K
	C1107	NCB31HK-472X	C CAP.	4700pF 50V K
	C1110	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1112	QETN1EM-476Z	E CAP.	47μF 25V M
	C1113	NCB31HK-472X	C CAP.	4700pF 50V K
	C1114	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1115	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1116	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1117	QFV71HJ-224Z	MF CAP.	0.22μF 50V J
	C1119	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1120	NDC31HJ-121X	C CAP.	120pF 50V J
	C1121	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1122	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1162	NCB31HK-152X	C CAP.	1500pF 50V K
	C1301	NCB31HK-123X	C CAP.	0.012μF 50V K
	C1302	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1303	NDC31HJ-100X	C CAP.	10pF 50V J
	C1304	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C1305	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1306	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1307	QETN1CM-477Z	E CAP.	470μF 16V M
	C1308	QETN1CM-107Z	E CAP.	100μF 16V M
	C1309	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1310	NDC31HJ-221X	C CAP.	220pF 50V J
	C1311	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1312	QENC1HM-474Z	E CAP.	0.47μF 50V M
	C1313	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C1314	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1315	QETN1CM-107Z	E CAP.	100μF 16V M
	C1316	QETN1HM-106Z	E CAP.	10μF 50V M
	C1317	NCB31EK-473X	C CAP.	0.047μF 25V K
	C1321	NDC31HJ-120X	C CAP.	12pF 50V J
	C1322	NCB31EK-273X	C CAP.	0.027μF 25V K
	C1323	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1324	QETN1HM-106Z	E CAP.	10μF 50V M
	C1325	QENC1HM-106Z	BP E CAP.	10μF 50V M
	C1326	NCS21HJ-221X	C CAP.	220pF 50V J
	C1341	QETN1HM-106Z	E CAP.	10μF 50V M
	C1352	QFZ0097-103	MM CAP.	0.01μF 1250V K
	C1354	NDC31HJ-271X	C CAP.	270pF 50V J
	C1355	NDC31HJ-221X	C CAP.	220pF 50V J
	C1356	NDC31HJ-331X	C CAP.	330pF 50V J
	C1357	QETN1AM-477Z	E CAP.	470μF 10V M
	C1365	QENC1HM-105Z	E CAP.	1μF 50V M
	C1366	QENC1HM-105Z	E CAP.	1μF 50V M
	C1367	QENC1HM-105Z	E CAP.	1μF 50V M
	C1401	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C1423	QCS32HJ-180Z	C CAP.	18pF 500V J
	C1424	QFLC2AJ-103Z	M CAP.	0.01μF 100V J
	C1426	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C1427	QETN1VM-107Z	E CAP.	100μF 35V M
	C1428	QETN1VM-107Z	E CAP.	100μF 35V M
	C1429	QETN1HM-106Z	E CAP.	10μF 50V M
	C1430	QFN32AJ-472Z	M CAP.	4700pF 100V J
	C1433	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1435	QETM1EM-228	E CAP.	2200μF 25V M
	C1436	QFV71HJ-334Z	MF CAP.	0.33μF 50V J
	C1437	NCB31HK-104X	C CAP.	0.1μF 50V K
	C1501	QETN1AM-477Z	E CAP.	470μF 10V M
	C1502	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1503	QETN1HM-106Z	E CAP.	10μF 50V M
	C1523	QETN1EM-476Z	E CAP.	47μF 25V M
⚠	C1525	QFZ0200-942	MPP CAP.	9400pF1.5kVH±3%
	C1526	QFLC1HJ-103Z	M CAP.	0.01μF 50V J
⚠	C1527	QFZ0199-374	MPP CAP.	0.37μF 250V J
	C1529	QFN32AJ-102Z	M CAP.	1000pF 100V J
	C1531	QEZ0203-107	E CAP.	100μF 160V M
	C1552	QETM1VM-108	E CAP.	1000μF 35V M
	C1554	QETN2EM-475Z	E CAP.	4.7μF 250V M
	C1555	QFLC2AJ-104Z	M CAP.	0.1μF 100V J

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CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1557	QETN1HM-107Z	E CAP.	100μF 50V M
	C1571	QETN1AM-107Z	E CAP.	100μF 10V M
	C1572	QETN1EM-476Z	E CAP.	47μF 25V M
	C1581	QFV71HJ-104Z	MF CAP.	0.1μF 50V J
	C1652	NCB31HK-473X	C CAP.	0.047μF 50V K
	C1653	QETN1HM-106Z	E CAP.	10μF 50V M
	C1654	QETN1CM-477Z	E CAP.	470μF 16V M
	C1655	QETN1HM-106Z	E CAP.	10μF 50V M
	C1656	QENC1HM-105Z	E CAP.	1μF 50V M
	C1657	QETN1EM-107Z	E CAP.	100μF 25V M
	C1658	QETM1EM-228	E CAP.	2200μF 25V M
	C1659	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1663	NCB31HK-102X	C CAP.	1000pF 50V K
	C1664	QETN1CM-107Z	E CAP.	100μF 16V M
	C1665	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1701	QETN1HM-106Z	E CAP.	10μF 50V M
	C1705	QETN1CM-477Z	E CAP.	470μF 16V M
	C1706	NCB31HK-104X	C CAP.	0.1μF 50V K
	C1707	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1708	QETN1AM-108Z	E CAP.	1000μF 10V M
	C1709	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1710	QETN1CM-107Z	E CAP.	100μF 16V M
	C1711	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1712	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1713	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1716	NDC31HJ-181X	C CAP.	180pF 50V J
	C1717	NDC31HJ-181X	C CAP.	180pF 50V J
	C1718	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1719	QETN1HM-105Z	E CAP.	1μF 50V M
	C1720	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1721	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1722	NDC31HJ-101X	C CAP.	100pF 50V J
	C1724	NDC31HJ-560X	C CAP.	56pF 50V J
	C1728	NDC31HJ-181X	C CAP.	180pF 50V J
	C1729	NDC31HJ-181X	C CAP.	180pF 50V J
	C1730	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1741	QETN1HM-106Z	E CAP.	10μF 50V M
	C1742	QETN1HM-106Z	E CAP.	10μF 50V M
	C1743	QETN1HM-106Z	E CAP.	10μF 50V M
	C1744	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1805	QETN1CM-227Z	E CAP.	220μF 16V M
	C1806	QETN1CM-477Z	E CAP.	470μF 16V M
	C1811	QETN1HM-106Z	E CAP.	10μF 50V M
	C1821	QETN1CM-107Z	E CAP.	100μF 16V M
	C1822	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1823	NDC31HJ-330X	C CAP.	33pF 50V J
	C1824	NDC31HJ-390X	C CAP.	39pF 50V J
	C1825	QETN1HM-105Z	E CAP.	1μF 50V M
	C1826	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1827	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1830	NDC31HJ-151X	C CAP.	150pF 50V J
	C1831	QFV71HJ-104Z	MF CAP.	0.1μF 50V J
	C1832	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1833	NDC31HJ-680X	C CAP.	68pF 50V J
	C1834	NDC31HJ-330X	C CAP.	33pF 50V J
	C1835	NDC31HJ-221X	C CAP.	220pF 50V J
	C1836	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C1837	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C1838	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C1841	NCB31HK-152X	C CAP.	1500pF 50V K
	C1843	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1844	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1845	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1846	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1847	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1848	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1849	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1852	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1853	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1854	QETN1CM-107Z	E CAP.	100μF 16V M
	C1855	QETN1HM-106Z	E CAP.	10μF 50V M
	C1856	NCB31HK-104X	C CAP.	0.1μF 50V K
⚠	C1901	QFZ9078-224	MPF CAP.	0.22μFAC275V M
⚠	C1904	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1905	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1907	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1909	QEZ0552-127	E CAP. or QEZ0199-127	120μF 400V M
⚠	C1910	QFZ9078-473	MPF CAP.	0.047μFAC275V M

⚠	Symbol No.	Part No.	Part Name	Description
	C1922	QFLC1HJ-104Z	M CAP.	0.1μF 50V J
	C1924	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1925	QETN1VM-476Z	E CAP.	47μF 35V M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V J
⚠	C1929	QFKA2JK-103	MM CAP.	0.01μF 630V K
⚠	C1931	QCZ0364-681	C CAP.	680pF 2kV K
	C1932	NDC31HJ-681X	C CAP.	680pF 50V J
	C1941	QCZ0364-561	C CAP.	560pF 2kV K
	C1942	QEZ0203-107	E CAP.	100μF 160V M
	C1944	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1945	QEHR1EM-108Z	E CAP.	1000μF 25V M
	C1946	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1947	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1948	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1949	NDC31HJ-471X	C CAP.	470pF 50V J
	C1976	QETN1EM-227Z	E CAP.	220μF 25V M
	C1977	QETN1CM-227Z	E CAP.	220μF 16V M
	C1978	QETN1EM-227Z	E CAP.	220μF 25V M
	C1979	QETN1AM-227Z	E CAP.	220μF 10V M
⚠	C1991	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1992	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1993	QCZ9079-222	C CAP.	2200pFAC250V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name
	T1501	QQR1244-001	DRIVE TRANSF.
⚠	T1522	QQH0134-001	F.B.TRANSF.
⚠	T1921	QQS0161-001	SW TRANSF.

COIL

Symbol No.	Part No.	Part Name	Description
L1001	QQL244K-8R2Z	COIL	8.2μH K
L1101	QQL244J-2R2Z	COIL	2.2μH J
L1103	QQL244K-8R2Z	COIL	8.2μH K
L1551	QQLZ034-360	INDUCTOR	
L1701	QQL244J-5R6Z	COIL	5.6μH J
L1821	NQL092K-4R7X	COIL	4.7μH
L1822	NQL092K-4R7X	COIL	4.7μH
L1823	NQL092K-4R7X	COIL	4.7μH
L1824	NQL092K-4R7X	COIL	4.7μH
L1825	NQL092K-4R7X	COIL	4.7μH
L1826	NQL092K-4R7X	COIL	4.7μH
L1827	NQL092K-4R7X	COIL	4.7μH
L1828	QQL244K-8R2Z	COIL	8.2μH K
L1941	QQL26AK-820Z	COIL	82μH K
L1942	QQL244J-4R7Z	INDUCTOR	
L1943	QQL244J-4R7Z	INDUCTOR	

DIODE

Symbol No.	Part No.	Part Name	Description
D1001	MTZJ33A-T2	ZENER DIODE	
D1301	MTZJ9.1B-T2	ZENER DIODE	
D1302	MTZJ9.1B-T2	ZENER DIODE	
D1305	AK04-T2	SB DIODE	
D1306	QRE121J-121Y	C R	120Ω 1/2W J
D1341	MA111-X	SI.DIODE	
D1372	MA111-X	SI.DIODE	
D1373	MA111-X	SI.DIODE	
D1421	MTZJ75-T2	ZENER DIODE	
D1423	1SR124-400A-T2	SI.DIODE	
D1425	MA111-X	SI.DIODE	
D1427	MTZJ27B-T2	ZENER DIODE	
D1501	MTZJ6.8C-T2	ZENER DIODE	
D1551	RGP10J-5025-T3	SI.DIODE	
D1552	RGP10J-5025-T3	SI.DIODE	
D1553	MTZJ9.1B-T2	ZENER DIODE	
D1554	MA111-X	SI.DIODE	
D1557	1SR124-400A-T2	SI.DIODE	
D1571	MTZJ7.5S-T2	ZENER DIODE	
D1581	MTZJ20B-T2	ZENER DIODE	
D1582	RGP10J-5025-T3	SI.DIODE	
D1651	MA111-X	SI.DIODE	
D1652	MTZJ12C-T2	ZENER DIODE	
D1653	MA111-X	SI.DIODE	
D1654	MTZJ12C-T2	ZENER DIODE	
D1655	MA111-X	SI.DIODE	
D1656	MA111-X	SI.DIODE	
D1657	MA111-X	SI.DIODE	

[AV-21FR3]

⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D1701	MA111-X	SI.DIODE	
	D1704	SLR-342VR-T16	LED	
	D1705	SLR-342DU-T16	LED	
	D1707	MA111-X	SI.DIODE	
	D1731	MA111-X	SI.DIODE	
	D1801	MA111-X	SI.DIODE	
⚠	D1901	G2SBA60	BRIDGE DIODE	
	D1921	RGP10J-5025-T3	SI.DIODE	
	D1925	RGP10J-5025-T3	SI.DIODE	
	D1927	MTZJ36A-T2	ZENER DIODE	
	D1928	MTZJ3.3A-T2	ZENER DIODE	
	D1929	MTZJ3.3A-T2	ZENER DIODE	
	D1930	RGP10M-5010-T3	SI.DIODE	
	D1931	MA111-X	SI.DIODE	
	D1933	MTZJ16C-T2	ZENER DIODE	
	D1941	RU3AM-LFC4	SI.DIODE	
	D1942	RU3YX-LFC4	SI.DIODE	
	D1943	RGP10J-5025-T3	SI.DIODE	
	D1982	MA111-X	SI.DIODE	
	D1983	MA111-X	SI.DIODE	
	TRANSISTOR			
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1301	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1302	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1351	STC344-T	SI.TRANSISTOR	
	Q1352	STC344-T	SI.TRANSISTOR	
	Q1353	STC344-T	SI.TRANSISTOR	
	Q1371	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1372	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1373	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR	
	Q1402	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1403	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1404	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1521	2SC2655/Y/-T	SI.TRANSISTOR	
⚠	Q1522	2SD2627-YB11	POWER TRANSISTOR	H.OUT
	Q1571	2SA1208/ST/Z1-T	SI.TRANSISTOR	
	Q1572	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1651	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1652	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1653	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1702	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1703	UN2212-X	DIGI.TRANSISTOR	
	Q1708	UN2212-X	DIGI.TRANSISTOR	
	Q1709	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR	
	Q1804	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1821	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1822	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1824	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1825	UN2212-X	DIGI.TRANSISTOR	
	Q1826	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1974	2SA966/OY/-T	SI.TRANSISTOR	
	Q1975	UN2212-X	DIGI.TRANSISTOR	

⚠	Symbol No.	Part No.	Part Name	Description
	IC			
	IC1301	NN5198K	I C	
	IC1371	TC4053BP/N/	I C	
	IC1421	AN5522	I C	
	IC1651	AN5265	I C	
⚠	IC1701	MN1873287JJ1	I C(MCU)	
	IC1702	AT24C08-21DMG3	I C	(SERVICE)
	IC1703	L78LR05E-MA	I C	
	IC1704	PIC-47143SY	IR DETECT UNIT	
⚠	IC1821	SDA5553-V006	I C(MCU)	
⚠	IC1822	PQ2L3252MS-X	I C	
⚠	IC1921	STR-W5753A/F5	I C	
	IC1971	BA17809T	I C	
	IC1972	BA17805T	I C	
	OTHERS			
		LC30114-001C-H	LED HOLDER	
		CM35921-005-H	CDS HOLDER	
⚠	CP1981	ICP-N25-Y	I.C.PROTECT	
⚠	CP1982	ICP-N75-Y	I.C.PROTECT	
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A
	FC1901	CEMG002-001Z	FUSE CLIP	(X2)
	FR1557	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	J1002	QNN0384-001	PIN JACK	
	J1003	QNN0281-003	PIN JACK	
	J1004	QNN0281-002	PIN JACK	
⚠	J1005	QNS0197-001	3.5 JACK	
	K1351	QQR0621-002Z	FERRITE BEADS	
	K1421	QQR1113-001Z	FERRITE BEADS	
	K1941	QQR1113-001Z	FERRITE BEADS	
	K1942	QQR1113-001Z	FERRITE BEADS	
	K1943	QQR1113-001Z	FERRITE BEADS	
⚠	LF1901	QQR0527-002	LINE FILTER	
	PC1701	P1241-04	PHOTO CONDUCTOR	
	S1701	QSW0619-003Z	TACT SWITCH	VOL+
	S1702	QSW0619-003Z	TACT SWITCH	VOL-
	S1703	QSW0619-003Z	TACT SWITCH	CH+
	S1704	QSW0619-003Z	TACT SWITCH	CH-
	S1705	QSW0619-003Z	TACT SWITCH	MENU
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW
	SF1102	QAX0666-002	SAW FILTER	
	SF1122	QAX0325-001	SAW FILTER	
⚠	SK1351	QNZ0537-001	CRT SOCKET	or QNZ0536-001
⚠	TH1901	QAD0121-9R0	THERMISTOR	or QAD0119-9R0
⚠	TU1001	QAU0282-001	TUNER	
⚠	VA1901	ERZV10V621CS	VARISTOR	or QAF0052-621
⚠	X1301	QAX0705-001Z	CRYSTAL	
	X1302	CE41651-001Z	X-TAL	
	X1701	QAX0307-001	C RESONATOR	
	X1821	QAX0669-001Z	CRYSTAL	

PRINTED WIRING BOARD PARTS LIST

[AV-21FMG3B]

MAIN P.W. BOARD ASS'Y (SCG-1432A-H2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1002	NRSA63J-221X	MG R	220Ω 1/16W J
	R1003	NRSA63J-221X	MG R	220Ω 1/16W J
	R1004	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1102	NRSA63J-750X	MG R	75Ω 1/16W J
	R1103	NRSA63J-100X	MG R	10Ω 1/16W J
	R1109	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1110	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1111	NRSA63J-181X	MG R	180Ω 1/16W J
	R1112	NRSA63J-220X	MG R	22Ω 1/16W J
	R1113	NRSA63J-101X	MG R	100Ω 1/16W J
	R1114	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1115	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1117	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1118	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1120	NRSA63J-391X	MG R	390Ω 1/16W J
	R1121	NRSA63J-221X	MG R	220Ω 1/16W J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W J
	R1161	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1162	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R1163	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1164	NRSA63J-221X	MG R	220Ω 1/16W J
	R1165	NRSA63J-220X	MG R	22Ω 1/16W J
	R1166	NRSA63J-821X	MG R	820Ω 1/16W J
	R1301	NRSA63J-221X	MG R	220Ω 1/16W J
	R1302	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1303	NRSA63J-101X	MG R	100Ω 1/16W J
	R1304	NRSA63J-101X	MG R	100Ω 1/16W J
	R1305	NRSA63J-101X	MG R	100Ω 1/16W J
	R1306	NRSA63J-221X	MG R	220Ω 1/16W J
	R1307	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R1308	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1312	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1313	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1314	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1321	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R1322	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1323	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1324	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1326	NRSA63J-101X	MG R	100Ω 1/16W J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W J
	R1341	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1347	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1349	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1351	NRSA63J-151X	MG R	150Ω 1/16W J
	R1352	NRSA63J-151X	MG R	150Ω 1/16W J
	R1353	NRSA63J-151X	MG R	150Ω 1/16W J
	R1354	NRSA63J-331X	MG R	330Ω 1/16W J
	R1355	NRSA63J-331X	MG R	330Ω 1/16W J
	R1356	NRSA63J-331X	MG R	330Ω 1/16W J
	R1357	NRSA63J-101X	MG R	100Ω 1/16W J
	R1358	NRSA63J-101X	MG R	100Ω 1/16W J
	R1359	NRSA63J-101X	MG R	100Ω 1/16W J
	R1360	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1361	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1362	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1363	QRL029J-123	OM R	12kΩ 2W J
	R1364	QRL029J-123	OM R	12kΩ 2W J
	R1365	QRL029J-123	OM R	12kΩ 2W J
	R1366	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1367	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1368	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R1372	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1374	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1401	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1421	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1423	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1424	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1425	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1426	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1429	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1430	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1431	NRSA63J-103X	MG R	10kΩ 1/16W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1432	QRE121J-3R9Y	C R	3.9Ω 1/2W J
	R1433	QRE121J-2R7Y	C R	2.7Ω 1/2W J
	R1436	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1437	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1438	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1439	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1440	QRE121J-471Y	C R	470Ω 1/2W J
	R1441	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1442	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W J
	R1453	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1502	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1503	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1525	QRL029J-180	OM R	18Ω 2W J
	R1526	QRE121J-271Y	C R	270Ω 1/2W J
	R1529	QRL039J-681	OM R	680Ω 3W J
	R1531	NRSA63J-331X	MG R	330Ω 1/16W J
	R1532	NRSA63J-102X	MG R	1kΩ 1/16W J
⚠	R1551	QRZ9011-1R0	F R	1.0Ω 1/2W J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	R1554	QRE121J-681Y	C R	680Ω 1/2W J
	R1571	QRE121J-222Y	C R	2.2kΩ 1/2W J
	R1573	QRT029J-1R5	MF R	1.5Ω 2W J
	R1574	QRT029J-1R5	MF R	1.5Ω 2W J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W J
	R1577	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1578	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W J
	R1582	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1583	NRSA63J-393X	MG R	39kΩ 1/16W J
	R1651	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1652	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1653	NRSA63J-331X	MG R	330Ω 1/16W J
	R1654	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1655	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1656	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R1657	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1658	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1659	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1660	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1661	QRE121J-271Y	C R	270Ω 1/2W J
	R1662	QRE121J-271Y	C R	270Ω 1/2W J
	R1664	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1665	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1666	NRSA63J-101X	MG R	100Ω 1/16W J
	R1667	QRE121J-101Y	C R	100Ω 1/2W J
⚠	R1668	QRT029J-5R6	MF R	5.6Ω 2W J
	R1701	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1702	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1703	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1704	NRSA63J-221X	MG R	220Ω 1/16W J
	R1705	NRSA63J-221X	MG R	220Ω 1/16W J
	R1706	NRSA63J-561X	MG R	560Ω 1/16W J
	R1707	NRSA63J-561X	MG R	560Ω 1/16W J
	R1708	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1709	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1710	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1711	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1712	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1713	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1714	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1715	NRSA63J-221X	MG R	220Ω 1/16W J
	R1716	NRSA63J-221X	MG R	220Ω 1/16W J
	R1718	NRSA63J-561X	MG R	560Ω 1/16W J
	R1719	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1720	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1721	NRSA63J-103X	MG R	10kΩ 1/16W J
⚠	R1723	QRL039J-270	OM R	27Ω 3W J
	R1725	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1726	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1727	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1728	NRSA63J-102X	MG R	1kΩ 1/16W J

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RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R1729	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1730	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1731	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1736	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1737	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1738	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1739	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1740	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1741	NRSA63J-561X	MG R	560Ω 1/16W J
	R1742	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1746	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1747	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1748	NRSA63J-101X	MG R	100Ω 1/16W J
	R1749	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1771	NRSA63J-821X	MG R	820Ω 1/16W J
	R1772	NRSA63J-821X	MG R	820Ω 1/16W J
	R1791	NRSA63J-221X	MG R	220Ω 1/16W J
	R1792	NRSA63J-221X	MG R	220Ω 1/16W J
	R1793	NRSA63J-221X	MG R	220Ω 1/16W J
	R1794	NRSA63J-221X	MG R	220Ω 1/16W J
	R1795	NRSA63J-221X	MG R	220Ω 1/16W J
	R1796	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1797	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1802	NRSA63J-750X	MG R	75Ω 1/16W J
	R1806	QRE121J-271Y	C R	270Ω 1/2W J
	R1807	NRSA63J-680X	MG R	68Ω 1/16W J
	R1810	QRG01GJ-560	OM R	56Ω 1W J
	R1811	NRSA63J-221X	MG R	220Ω 1/16W J
	R1815	QRE121J-181Y	C R	180Ω 1/2W J
	R1816	NRSA63J-681X	MG R	680Ω 1/16W J
	R1817	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1901	QRF104K-3R9	UNF R	3.9Ω 10W K
	R1903	QRL029J-104	OM R	100kΩ 2W J
	R1904	QRL039J-151	OM R	150Ω 3W J
	R1906	QRL029J-104	OM R	100kΩ 2W J
	R1921	QRE121J-2R2Y	C R	2.2Ω 1/2W J
	R1922	QRE121J-221Y	C R	220Ω 1/2W J
	R1923	QRM034J-R22	MP R	0.22Ω 3W J
	R1928	QRL039J-683	OM R	68kΩ 3W J
	R1933	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1934	NRSA63J-683X	MG R	68kΩ 1/16W J
	R1935	QRE121J-562Y	C R	5.6kΩ 1/2W J
	R1974	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1976	QRT029J-8R2	MF R	8.2Ω 2W J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W J
	R1978	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1979	QRL039J-220	OM R	22Ω 3W J
	R1980	QRL029J-152	OM R	1.5kΩ 2W J
⚠	R1991	QRZ9046-825Z	C R	8.2MΩ 1/2W K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1001	QETN1HM-106Z	E CAP.	10μF 50V M
	C1002	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1004	QETN1CM-477Z	E CAP.	470μF 16V M
	C1005	QFV71HJ-104Z	MF CAP.	0.1μF 50V J
	C1008	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1103	QETN1EM-476Z	E CAP.	47μF 25V M
	C1104	NCB31HK-472X	C CAP.	4700pF 50V K
	C1105	NCB31HK-472X	C CAP.	4700pF 50V K
	C1106	NCB31HK-472X	C CAP.	4700pF 50V K
	C1107	NCB31HK-472X	C CAP.	4700pF 50V K
	C1109	NCB31HK-472X	C CAP.	4700pF 50V K
	C1110	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1112	QETN1EM-476Z	E CAP.	47μF 25V M
	C1113	NCB31HK-472X	C CAP.	4700pF 50V K
	C1114	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1115	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1116	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1117	QFV71HJ-224Z	MF CAP.	0.22μF 50V J
	C1119	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1120	NDC31HJ-121X	C CAP.	120pF 50V J
	C1121	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1122	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1162	NCB31HK-152X	C CAP.	1500pF 50V K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1164	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1165	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1166	NCB31HK-104X	C CAP.	0.1μF 50V K
	C1301	NCB31HK-123X	C CAP.	0.012μF 50V K
	C1302	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1303	NDC31HJ-100X	C CAP.	10pF 50V J
	C1304	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C1305	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1306	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1307	QETN1CM-477Z	E CAP.	470μF 16V M
	C1308	QETN1CM-107Z	E CAP.	100μF 16V M
	C1309	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1310	NDC31HJ-221X	C CAP.	220pF 50V J
	C1311	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1312	QENC1HM-474Z	E CAP.	0.47μF 50V M
	C1313	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C1314	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1315	QETN1CM-107Z	E CAP.	100μF 16V M
	C1316	QETN1HM-106Z	E CAP.	10μF 50V M
	C1317	NCB31EK-473X	C CAP.	0.047μF 25V K
	C1321	NDC31HJ-120X	C CAP.	12pF 50V J
	C1322	NCB31EK-273X	C CAP.	0.027μF 25V K
	C1323	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1324	QETN1HM-106Z	E CAP.	10μF 50V M
	C1325	QENC1HM-106Z	BP E CAP.	10μF 50V M
	C1326	NCS21HJ-221X	C CAP.	220pF 50V J
	C1341	QETN1HM-106Z	E CAP.	10μF 50V M
	C1352	QFZ0097-103	MM CAP.	0.01μF 1250V K
	C1354	NDC31HJ-271X	C CAP.	270pF 50V J
	C1355	NDC31HJ-221X	C CAP.	220pF 50V J
	C1356	NDC31HJ-331X	C CAP.	330pF 50V J
	C1357	QETN1AM-477Z	E CAP.	470μF 10V M
	C1365	QENC1HM-105Z	E CAP.	1μF 50V M
	C1366	QENC1HM-105Z	E CAP.	1μF 50V M
	C1367	QENC1HM-105Z	E CAP.	1μF 50V M
	C1401	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C1423	QCS32HJ-180Z	C CAP.	18pF 500V J
	C1424	QFLC2AJ-103Z	M CAP.	0.01μF 100V J
	C1426	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C1427	QETN1VM-107Z	E CAP.	100μF 35V M
	C1428	QETN1VM-107Z	E CAP.	100μF 35V M
	C1429	QETN1HM-106Z	E CAP.	10μF 50V M
	C1430	QFN32AJ-472Z	M CAP.	4700pF 100V J
	C1433	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1435	QETM1EM-228	E CAP.	2200μF 25V M
	C1436	QFV71HJ-334Z	MF CAP.	0.33μF 50V J
	C1437	NCB31HK-104X	C CAP.	0.1μF 50V K
	C1501	QETN1AM-477Z	E CAP.	470μF 10V M
	C1502	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1503	QETN1HM-106Z	E CAP.	10μF 50V M
	C1523	QETN1EM-476Z	E CAP.	47μF 25V M
⚠	C1525	QFZ0200-972	MPP CAP.	9700pF1.5kVH±3%
	C1526	QFLC1HJ-103Z	M CAP.	0.01μF 50V J
⚠	C1527	QFZ0199-334	MPP CAP	0.33μF 250V J
	C1529	QFN32AJ-102Z	M CAP.	1000pF 100V J
	C1531	QEZ0203-107	E CAP.	100μF 160V M
	C1552	QETM1VM-108	E CAP.	1000μF 35V M
	C1554	QETN2EM-475Z	E CAP.	4.7μF 250V M
	C1555	QFLC2AJ-104Z	M CAP.	0.1μF 100V J
	C1557	QETN1HM-107Z	E CAP.	100μF 50V M
	C1571	QETN1AM-107Z	E CAP.	100μF 10V M
	C1572	QETN1EM-476Z	E CAP.	47μF 25V M
	C1581	QFV71HJ-104Z	MF CAP.	0.1μF 50V J
	C1652	NCB31HK-473X	C CAP.	0.047μF 50V K
	C1653	QETN1HM-106Z	E CAP.	10μF 50V M
	C1654	QETN1CM-477Z	E CAP.	470μF 16V M
	C1655	QETN1HM-106Z	E CAP.	10μF 50V M
	C1656	QENC1HM-105Z	E CAP.	1μF 50V M
	C1657	QETN1EM-107Z	E CAP.	100μF 25V M
	C1658	QETN1EM-227Z	E CAP.	220μF 25V M
	C1659	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1663	NCB31HK-102X	C CAP.	1000pF 50V K
	C1664	QETN1CM-107Z	E CAP.	100μF 16V M
	C1665	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1701	QETN1HM-106Z	E CAP.	10μF 50V M
	C1705	QETN1CM-477Z	E CAP.	470μF 16V M

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CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1706	NCB31HK-104X	C CAP.	0.1μF 50V K
	C1707	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1708	QETN1AM-108Z	E CAP.	1000μF 10V M
	C1709	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1710	QETN1CM-107Z	E CAP.	100μF 16V M
	C1711	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1712	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1713	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1716	NDC31HJ-181X	C CAP.	180pF 50V J
	C1717	NDC31HJ-181X	C CAP.	180pF 50V J
	C1718	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1719	QETN1HM-105Z	E CAP.	1μF 50V M
	C1720	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1721	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1722	NDC31HJ-101X	C CAP.	100pF 50V J
	C1724	NDC31HJ-560X	C CAP.	56pF 50V J
	C1728	NDC31HJ-181X	C CAP.	180pF 50V J
	C1729	NDC31HJ-181X	C CAP.	180pF 50V J
	C1730	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1741	QETN1HM-106Z	E CAP.	10μF 50V M
	C1742	QETN1HM-106Z	E CAP.	10μF 50V M
	C1743	QETN1HM-106Z	E CAP.	10μF 50V M
	C1744	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1805	QETN1CM-227Z	E CAP.	220μF 16V M
	C1806	QETN1CM-477Z	E CAP.	470μF 16V M
	C1811	QETN1HM-106Z	E CAP.	10μF 50V M
	C1841	NCB31HK-152X	C CAP.	1500pF 50V K
⚠	C1901	QFZ9078-224	MPF CAP.	0.22μFAC275V M
⚠	C1904	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1905	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1907	QCZ9015-102	C CAP.	1000pFAC250V Z
⚠	C1909	QEZ0552-127	E CAP. or QEZ0199-127	120μF 400V M
⚠	C1910	QFZ9078-473	MPF CAP.	0.047μFAC275V M
	C1922	QFLC1HJ-104Z	M CAP.	0.1μF 50V J
	C1924	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1925	QETN1VM-476Z	E CAP.	47μF 35V M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V J
⚠	C1929	QFKA2JK-103	MM CAP.	0.01μF 630V K
⚠	C1931	QCZ0364-681	C CAP.	680pF 2kV K
	C1932	NDC31HJ-681X	C CAP.	680pF 50V J
	C1941	QCZ0364-561	C CAP.	560pF 2kV K
	C1942	QEZ0203-107	E CAP.	100μF 160V M
	C1944	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1945	QEHR1EM-108Z	E CAP.	1000μF 25V M
	C1946	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1947	QCB32HK-222Z	C CAP.	2200pF 500V K
	C1948	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1949	NDC31HJ-471X	C CAP.	470pF 50V J
	C1961	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C1976	QETN1EM-227Z	E CAP.	220μF 25V M
	C1977	QETN1CM-227Z	E CAP.	220μF 16V M
	C1978	QETN1EM-227Z	E CAP.	220μF 25V M
	C1979	QETN1AM-227Z	E CAP.	220μF 10V M
⚠	C1991	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1992	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1993	QCZ9079-222	C CAP.	2200pFAC250V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description
	T1501	QQR1244-001	DRIVE TRANSF.	
⚠	T1522	QQH0131-001	F.B.TRANSF.	
⚠	T1921	QQS0161-001	SW TRANSF.	

COIL

⚠	Symbol No.	Part No.	Part Name	Description
	L1001	QQL244K-8R2Z	COIL	8.2μH K
	L1101	QQL244J-2R2Z	COIL	2.2μH J
	L1103	QQL244K-8R2Z	COIL	8.2μH K
	L1551	QQLZ034-240	INDUCTOR	
	L1701	QQL244J-5R6Z	COIL	5.6μH J
	L1941	QQL26AK-820Z	COIL	82μH K
	L1942	QQL244J-4R7Z	INDUCTOR	
	L1943	QQL244J-4R7Z	INDUCTOR	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1102	MA859-T2	SI.DIODE	
	D1301	MTZJ9.1B-T2	ZENER DIODE	
	D1302	MTZJ9.1B-T2	ZENER DIODE	
	D1305	AK04-T2	SB DIODE	
	D1306	QRE121J-121Y	C R	120Ω 1/2W J
	D1341	MA111-X	SI.DIODE	
	D1421	MTZJ75-T2	ZENER DIODE	
	D1423	1SR124-400A-T2	SI.DIODE	
	D1425	MA111-X	SI.DIODE	
	D1427	MTZJ27B-T2	ZENER DIODE	
	D1501	MTZJ6.8C-T2	ZENER DIODE	
	D1551	RGP10J-5025-T3	SI.DIODE	
	D1552	RGP10J-5025-T3	SI.DIODE	
	D1553	MTZJ9.1B-T2	ZENER DIODE	
	D1554	MA111-X	SI.DIODE	
	D1557	1SR124-400A-T2	SI.DIODE	
	D1571	MTZJ7.5S-T2	ZENER DIODE	
	D1581	MTZJ20B-T2	ZENER DIODE	
	D1582	RGP10J-5025-T3	SI.DIODE	
	D1651	MA111-X	SI.DIODE	
	D1652	MTZJ12C-T2	ZENER DIODE	
	D1653	MA111-X	SI.DIODE	
	D1654	MTZJ12C-T2	ZENER DIODE	
	D1655	MA111-X	SI.DIODE	
	D1656	MA111-X	SI.DIODE	
	D1657	MA111-X	SI.DIODE	
	D1701	MA111-X	SI.DIODE	
	D1704	SLR-342VR-T16	LED	
	D1705	SLR-342DU-T16	LED	
	D1707	MA111-X	SI.DIODE	
	D1731	MA111-X	SI.DIODE	
⚠	D1901	G2SBA60	BRIDGE DIODE	
	D1921	RGP10J-5025-T3	SI.DIODE	
	D1925	RGP10J-5025-T3	SI.DIODE	
	D1927	MTZJ36A-T2	ZENER DIODE	
	D1928	MTZJ3.3A-T2	ZENER DIODE	
	D1929	MTZJ3.3A-T2	ZENER DIODE	
	D1930	RGP10M-5010-T3	SI.DIODE	
	D1931	MA111-X	SI.DIODE	
	D1933	MTZJ16C-T2	ZENER DIODE	
	D1941	RU3AM-LFC4	SI.DIODE	
	D1942	RU3YX-LFC4	SI.DIODE	
	D1943	RGP10J-5025-T3	SI.DIODE	
	D1982	MA111-X	SI.DIODE	
	D1983	MA111-X	SI.DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1103	UN2212-X	DIGI.TRANSISTOR	
	Q1161	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1301	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1302	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1351	STC344-T	SI.TRANSISTOR	
	Q1352	STC344-T	SI.TRANSISTOR	
	Q1353	STC344-T	SI.TRANSISTOR	
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR	
	Q1402	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1403	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1404	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1521	2SC2655/Y/-T	SI.TRANSISTOR	
⚠	Q1522	2SD2627-YB11	POWER TRANSISTOR	H.OUT
	Q1571	2SA1208/ST/Z1-T	SI.TRANSISTOR	
	Q1572	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1651	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1652	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1653	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1702	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1703	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1708	UN2212-X	DIGI.TRANSISTOR	
	Q1709	2SB709A/QR/-X	SI.TRANSISTOR	
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR	
	Q1804	2SD601A/QR/-X	SI.TRANSISTOR	
	Q1974	2SA966/OY/-T	SI.TRANSISTOR	
	Q1975	UN2212-X	DIGI.TRANSISTOR	

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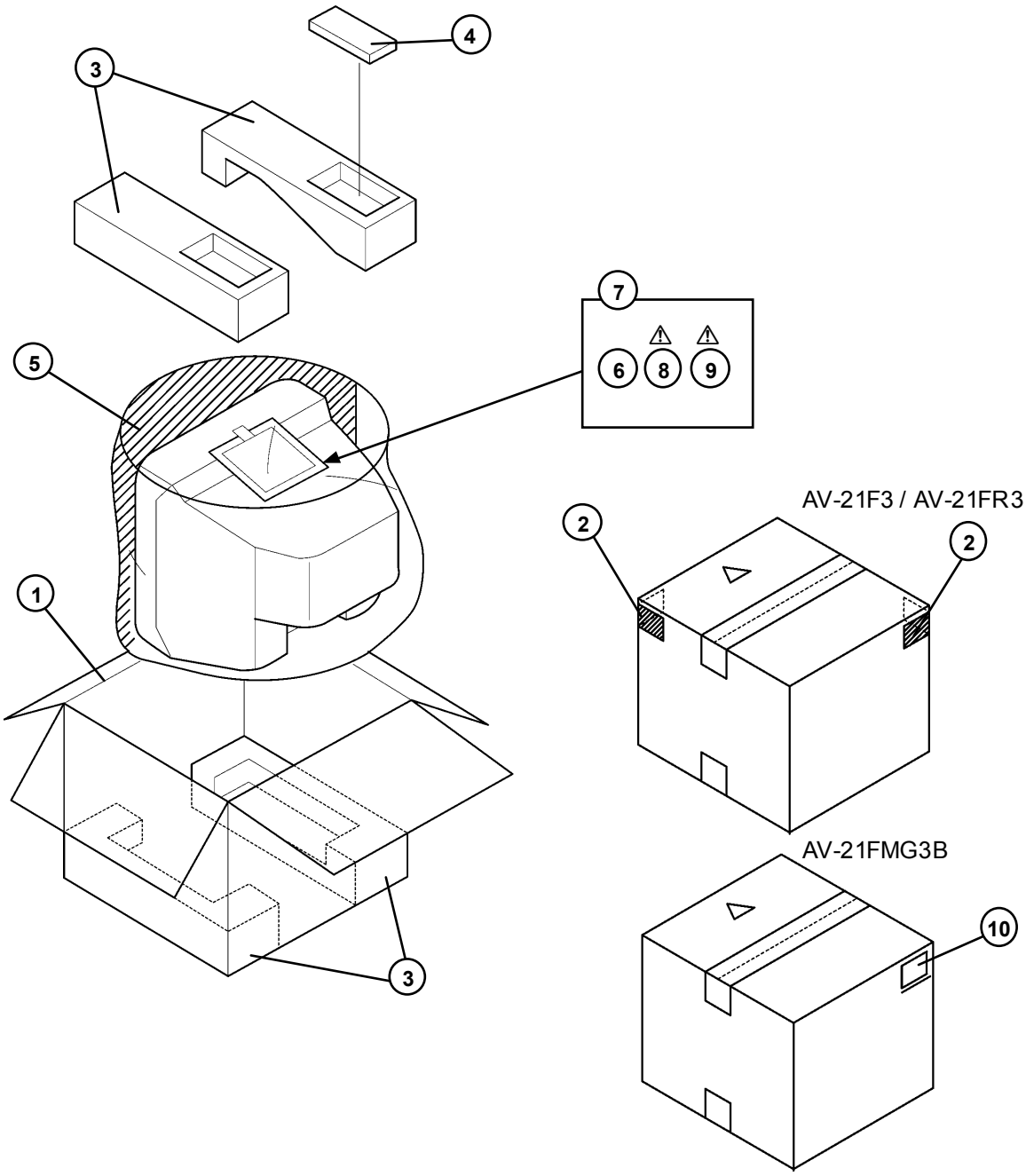
⚠	Symbol No.	Part No.	Part Name	Description
	IC			
	IC1301	NN5198K	I C	
	IC1421	AN5522	I C	
	IC1651	AN5265	I C	
⚠	IC1701	MN1873287JJ1	I C(MCU)	
	IC1702	AT24C08-21DMG3	I C	(SERVICE)
	IC1703	L78LR05E-MA	I C	
	IC1704	PIC-47143SY	IR DETECT UNIT	
⚠	IC1921	STR-W5753A/F5	I C	
	IC1971	BA17809T	I C	
	IC1972	BA17805T	I C	
	OTHERS			
		LC30114-001C-H	LED HOLDER	
		CM35921-005-H	CDS HOLDER	
	CF1161	QAX0642-001Z	C FILTER	
⚠	CP1981	ICP-N25-Y	I.C.PROTECT	
⚠	CP1982	ICP-N75-Y	I.C.PROTECT	
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A
	FC1901	CEMG002-001Z	FUSE CLIP	(X2)
	FR1557	QRJ146J-2R2X	C R	2.2Ω 1/4W J
	J1002	QNN0384-001	PIN JACK	or CEMN065-001
	J1003	QNN0281-003	PIN JACK	or CEMN065-002
	J1004	QNN0281-002	PIN JACK	
⚠	J1005	QNS0197-001	3.5 JACK	
	K1351	QQR0621-002Z	FERRITE BEADS	
	K1421	QQR1113-001Z	FERRITE BEADS	
	K1941	QQR1113-001Z	FERRITE BEADS	
	K1942	QQR1113-001Z	FERRITE BEADS	
	K1943	QQR1113-001Z	FERRITE BEADS	
⚠	LF1901	QQR0527-002	LINE FILTER	
	PC1701	P1241-04	PHOTO CONDUCTOR	
	S1701	QSW0619-003Z	TACT SWITCH	VOL+
	S1702	QSW0619-003Z	TACT SWITCH	VOL-
	S1703	QSW0619-003Z	TACT SWITCH	CH+
	S1704	QSW0619-003Z	TACT SWITCH	CH-
	S1705	QSW0619-003Z	TACT SWITCH	MENU
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW
	SF1102	QAX0731-001	SAW FILTER	
	SF1122	QAX0325-001	SAW FILTER	
⚠	SK1351	QNZ0537-001	CRT SOCKET	or QNZ0536-001
⚠	TH1901	QAD0121-9R0	THERMISTOR	or QAD0119-9R0
⚠	TU1001	QAU0282-001	TUNER	
⚠	VA1901	ERZV10V621CS	VARISTOR	or QAF0052-621
⚠	X1301	QAX0705-001Z	CRYSTAL	
	X1302	CE41651-001Z	X-TAL	
	X1701	QAX0307-001	C RESONATOR	

PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
AV-21F3				
	1	GG10056-067A-H	P CASE	
	2	GG20012-001A-H	CORNER LABEL	(×2)
	3	LC10516-002A-H	CUSHION ASSY	4pcs in 1set
	4	RM-C364GY-1H	RC HAND PIECE	
	5	CP30967-003-H	POLY BAG	or CP30967-005-H
	6	R6PY/2S	BATTERY	(×2)
	7	CP30966-001-H	POLY BAG	
⚠	8	LCT1188-001A-H	INST BOOK	
⚠	9	LCT1189-001A-H	DIGEST MANUAL	
AV-21FR3				
	1	GG10056-067A-H	P CASE	
	2	GG20012-001A-H	CORNER LABEL	(×2)
	3	LC10516-002A-H	CUSHION ASSY	4pcs in 1set
	4	RM-C90-1H	RC HAND PIECE	
	5	CP30967-003-H	POLY BAG	or CP30967-005-H
	6	R6PY/2S	BATTERY	(X2)
	7	CP30966-001-H	POLY BAG	
⚠	8	LCT1188-001A-H	INST BOOK	
⚠	9	LCT1189-001A-H	DIGEST MANUAL	
AV-21FMG3B				
	1	GG10056-067A-H	P CASE	
	3	LC10516-002A-H	CUSHION ASSY	4pcs in 1set
	4	RM-C364-1H	RC HAND PIECE	
	5	CP30967-003-H	POLY BAG	or CP30967-005-H
	6	R6PY/2S	BATTERY	(X2)
	7	CP30966-001-H	POLY BAG	
⚠	8	LCT1188-001A-H	INST BOOK	
⚠	9	LCT1189-001A-H	DIGEST MANUAL	
	10	CM47385-00B-H	POS,SERIAL LABEL	

PACKING



JVC

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AV21F3-H
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AV21FMG3B-H

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NOTES

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